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Notice.

All Communications, Articles, Letters, Notices, and Books for Review, should be forwarded, accompanied by the name of the sender, to the Editor, GUY'S HOSPITAL GAZETTE, *Guy's Hospital, S.E.*

Any of our Subscribers who may be desirous of having their numbers of the GAZETTE *bound should leave them with the Librarian.*

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The charge for binding in blue, with the Arms of the Hospital in gold, will be ONE SHILLING AND SIXPENCE.

Calendar of Coming Events.

January, 1901.

Sat. 5.—Messrs. Jacobson and Fripp's take-in; Drs., M. W. Cohen and W. H. Bowen; Cl., F. G. Gibson.
1 p.m., Clinical lecture by Dr. Shaw.
G.H.R.F.C., I., Old Leysians, away.
II., Rosslyn Park, home.
G.H.A.F.C., I., Old Eastbournians, home.

Wed. 9.—1.30 p.m., Clinical lecture by Mr. Golding-Bird.

Thur. 10.—Messrs. Howse and Symonds' take-in; Drs., C. H. Gask and V. M. Wallis; Cl., J. M. Butler.

Fri. 11.—Meeting of the Dental Society at 4 p.m.

Sat. 12.—1 p.m., Clinical lecture by Dr. Fawcett.
G.H.R.F.C., II., R.N.C. Old Boys, home.
IV., Court Hill "A," away.
G.H.A.F.C., I., West Kent F. C., home.
II., Banstead, away.
G.H.P.P.S., Clinical Meeting.

Mon. 14.—1.15 p.m., Clinical lecture by Dr. Galabin.

Wed. 16.—1.30 p.m., Clinical lecture by Mr. Golding-Bird.
G.H.R.F.C., St. Thomas', home.

Thur. 17.—Messrs. Lucas and Lane's take-in; Drs., H. A. Cutler and W. G. Parker; Cl., H. S. French.

Sat. 19.—1 p.m., Clinical lecture by Dr. Fawcett.
G.H.R.F.C., I., Rosslyn Park, home.
II., Hammersmith, away.
III., Polytechnic "A," away.
IV., Streatham III., away.
G.H.A.F.C., I., Beckenham, home.
II., Beckenham 2nd XI., away.

Guy's Hospital Gazette,

JANUARY 5, 1901.

Structural Progress at Guy's during 1900.

THE record of the Works Department in such an Institution as this, would, if published, stagger forty-nine out of every fifty worthy citizens. It may be even asserted, truthfully, that a large percentage of those whose lives are spent within the precincts, are but dimly conscious of the daily work necessary to keep so vast a fabric in sound condition, and equal to the ever increasing-demands upon its resources. This being the case in regard to the ordinary repairs and renovations which find a place in every annual account of expenditure, it does not lose in force, when, as at Guy's in the present era, great improvements and additions of far-reaching importance are in progress.

The past year has seen many works commenced and completed, and the larger enterprises advanced by a notable stage. If it be permitted to deal with these geographically, old Guy's men on revisiting the Hospital after twelve months' absence must not allow the new white stone of the enlarged Front Surgery to blind their notice of the handsome and heightened cresting to the front gates. They cannot be expected to perceive that new drains have been laid under the quadrangle. The extension of the Surgery has been secured by building out to the level of the grey stone centre, and while the symmetry of the quad. is for the moment impaired it will be restored when a similar addition is made on the other side. Meantime the improved and enlarged Surgery is a thing to glory in, for itself, and for the sake of the daily increasing number of those who seek its ministrations.

Three more Surgical Wards, Astley-Cooper, Charity and Martha have been renovated, and if not actually rebuilt at any rate transformed. An Isolation Ward with accommodation for fourteen patients is on the point of completion, and the addition of Sanitary Blocks to the Surgical Buildings has been continued. One

particularly noticeable improvement will also be seen at the end of the Colonnade; the familiar pillars (they were of oak surrounded by wooden casings painted to resemble granite) having been removed and replaced by red-brick columns, tiled in the lower portions for their own cleanliness sake and for the comfort of those who lean against them. This was a work of safety to the structure and formed part of a larger work of like character upon which we have not space to dwell.

Passing on to the "Park," the stranger to Guy's in 1900 will rub his eyes at the great framework of the Henriette Raphael Nurses' Home, now roof high. This building will provide complete accommodation for a Nursing Staff of two hundred and fifty persons. Alongside will be seen the new Laundry, nearly approaching completion, and already doing the work of the establishment. This Laundry is one of the sights of the place, and perhaps even more striking will be a visit to the allied Central Power Station, from which the Laundry is worked, and by which the whole Hospital will eventually be heated by steam pipes and lighted by electricity.

The scheme for these larger works is too vast for detailed treatment on this occasion, nor can reference even be made to the many smaller improvements which the past year has seen effected, but one exception must be made in order to call attention to the balconies which have been added to some of the Surgical Wards, to the great boon and benefit of convalescing patients.

Outside the Hospital and outside its finances are two matters of interest which deserve record. First, the Guy's Hospital Nursing Institution has secured an additional house in St. Thomas's Street, thus permitting an increase in the staff, and providing for the better working of the District Maternity Charity; secondly, the Nurses' Recreation Society have obtained excellent grounds at Honor Oak Park, and rejoice in the possession of an excellent Club House, with residential quarters.

And if there be any that doubt the utility of all this, which we cannot believe, our answer is, "come and see, and be converted."

Pneumonia.

CLINICAL LECTURE BY DR. PITT,

November 3rd, 1900.

GENTLEMEN,—I propose to-day to continue the lecture on Pneumonia. Last week, I brought before you the more important symptoms, and I now propose to discuss certain variations in the physical signs which may occur, and then pass on to the question of the sequelæ, the prognosis and treatment.

The physical signs.—You are all familiar with the typical physical signs, which are defective movement; on percussion impaired note or dulness; and on auscultation fine crepitations passing on gradually to indeterminate and then to tubular breathing; increased voice-sounds going on to bronchophony; and increased tactile vocal fremitus.

As to the physical signs which can be made out at the onset of the disease. In a fair number of cases, more particularly in children, it may be very difficult for two or three days to be certain as to any definite abnormal physical signs. The amount of pleurisy at the onset varies greatly. As a rule, when the patient has intense pain, it is the lower part of the chest which is affected.

With intense pain there is necessarily great disturbance of the respiration, producing gasping breathing and dyspnœa, and the breathing is often so irregular and jerky that it is very difficult to make out what is abnormal. The deficiency of breathing and the stoppage of the movement is often sufficient to mask the pleuritic rub. It may sometimes be heard within two hours of the onset of the pain, but this is exceptional.

But, putting on one side deficient breathing, and possibly a pleuritic rub, the signs which may be most often made out at the onset are an increase in resistance on percussion, with fine crepitations. It is very important to learn to appreciate the defect of vibration and the increased resistance with which the finger meets, as these abnormalities may be more noticeable than the audible change in note. When percussing, particularly if several fingers are laid flat on the chest so as to cut off some of the adjacent vibration, you will also be able to make out early some impairment of note. In many cases the disease will last for some considerable time before the note actually becomes dull, and the extreme dulness which a fluid effusion produces does not usually develop. Often, instead of dulness, there is a tympanitic or

subtympanitic note, associated with an increased resistance and deficient vibration. If there are two nodules of consolidation, one of which has a large area adjacent to the surface, and the other a small patch which extends deeply, the important factor in determining the note on percussion is the extent of the superficial area. To produce a dull note there must be two inches square, at least, of consolidated lung in contact with the thorax; with a patch half an inch or so across at the surface, and extending down deeply the note will be but slightly impaired. The dulness of the note depends on the extent of the consolidation which is in contact with the surface of the lung. Consequently, you will quite understand that when the amount near the surface is not very large, you may have extensive mischief deeper without the note being dull; as consolidation often commences deeply, one reason for the delay in the development in the physical signs is obvious.

By a fine crepitation is meant not only a very fine râle, but a consonating râle; it implies, therefore, an extremely sharp, consonating, fine, râle. When fine crepitations are present they are pathognomonic of the intense engorgement which precedes consolidation. In small children consonating râles and bronchophony are the evidence of consolidation more commonly than tubular breathing. Fine crepitations are probably not detected in more than one-half of the cases of pneumonia.

The intensity and character of tubular breathing also varies. When a large area of lung is solid close to the surface of the chest, the probabilities are that the tubular breathing is well marked. And it is very important, in describing tubular breathing, to put an adjective before it, so as to distinguish between the barely audible tubular breathing which is present with a large pleuritic effusion, and the extremely sharp, clear, whiffing tubular breathing which develops with consolidation of the lung. When you have once heard the typical breathing due to consolidation, you have quite a characteristic sound, which will at once be recalled by a similar condition. But tubular breathing, without pneumonic consolidation, may develop in several conditions. If you listen to a child, the breathing (puerile) is much more noisy than in an adult, because the lungs are smaller; the sounds are conveyed across less pulmonary tissue and are consequently much less altered. The normal breath-sounds audible over a child's chest differ less from tubular breathing than they do in an adult. When you listen to a child with pneumonia and note a difference in the breathing on the two sides, you are very apt, at first, to consider that the louder breathing indicates the diseased side. As a rule the diseased side is the one where the breathing is deficient. Bear in mind, therefore, that it is not infrequent in the earlier stages for the breath-sounds not to be tubular, but to be deficient, and in some cases to be absent. In many cases the mischief begins in the middle of the lung, and the consolidation as it spreads will tend to extend to the surface, and it is not until it has reached the surface that the physical signs become marked.

After consolidation one of two events may take place. The exudation may be absorbed through the lymphatics very rapidly, sometimes within twenty-four or forty-eight hours, without any expectoration. In such cases, on examining the lung, but few moist sounds in addition to the loud tubular breathing are audible.

On the other hand, the exudation may be liquefied and gradually brought up along the bronchi, and either swallowed or expectorated. In such cases an abundance of moist consonating râles, the *crepitatio redux* of authors, is an indication of the liquefaction that is going on, and will give you some idea as to the amount of expectoration which is coming up. Therefore, you may determine by listening to the lung whether the patient is absorbing the exudation through the lymphatics, or bringing it up through the trachea. Children under seven years of age almost invariably swallow the expectoration, and the same often takes place with regard to adults.

The amount of lymph that may be poured out on the surface of the lung varies considerably in different cases. Sometimes it is very large in amount, and there is no doubt that in such cases the crisis tends to be delayed and recovery to take place more slowly.

The classical description of the course of the temperature, during pneumonia, is a more or less continuously high temperature, with a sudden onset and fall. It should be added, however, that in many cases there is a secondary rise of two or three degrees lasting only for a day, and commencing twenty-four to thirty-six hours after the first fall.

The voice-sounds and the tactile vocal fremitus vary in pneumonia according to the local condition. When the consolidation commences in the centre of the lung, they are diminished, but as the mischief comes to the surface they both tend to be increased.

The difficulties in diagnosing between a *pneumonic lung and a pleuritic effusion* were discussed by Dr. Addison many years ago; in both of them dulness and tubular breathing may be present.

The tubular breathing in pneumonia may be sharp and whiffing, but this is not always the case. With a large effusion the lung is compressed so that in an adult a distant tubular breathing may be audible.

With effusion the voice-sounds are generally transmitted more feebly than normally, occasionally there is bronchophony, but, as Dr. Addison pointed out, the vocal fremitus is never increased, and it is on this last sign that we should lay stress in cases of doubt.

Great difficulty may arise with large effusions in small children, when loud tubular breathing, bronchophony and dulness may be present, and in children the condition of the fremitus is not easily determined. In such a case the heart and liver will be displaced, which never occurs with pneumonia, however extensive.

Sir Samuel Wilks used to lay great stress on another group of physical signs. Supposing dulness and tubular breathing to be present at one spot, and you want to make up your mind whether they are due to a patch of solid lung or to a localised empyema. When the signs are due to pneumonia you cannot pass, as you move your stethoscope over the chest, from tubular to vesicular breathing without crossing an area where there are consonating râles; whereas when they are due to a localised empyema you pass from tubular to normal breathing without hearing any consonating râles. This is a valuable guide when dealing with small children, in whom the pneumonia may not have cleared up, and you are uncertain as to whether an empyema has developed.

Examination generally shows, if the pneumonia is in the lower part, that the chest is in a position of full inspiration and the diaphragm is not raised, whereas a small pleuritic effusion on the left side causes a rise of the diaphragm, which is a point of distinction which is often of value.

In addition to the signs I have mentioned, pulsation of the chest over a consolidation of the lung is not infrequently noticed when the mass is situated on either side near the region of the heart. There are two explanations of this: one, which is the more probable, is that the solid lung transmits the pulsation of the heart; and the other is that the pulmonary vessels are enormously engorged and the pulsation is transmitted from the vessels and not from the heart itself. But possibly the explanation varies in the different cases.

The constitutional disturbances which occur in pneumonia bear no relation whatever to the physical signs. A patient may be extremely delirious and ill, and all that may be detected is evidence of a very small patch of consolidation at one apex. So also, when the mischief clears up, a patient may have a normal temperature and feel well, while the consolidation of the lung may continue to increase. It is, therefore, most important always to bear in mind that pneumonia is an infective process, and not a mere local disease of the lung.

The amount of abnormal physical signs which remain after the acute attack varies in different cases. A pleuritic rub may remain as long as a month or six weeks after an attack of pneumonia, and the patient may be apparently in perfect health and suffer no inconvenience at all. Such a condition would not necessitate any treatment beyond care in avoiding exposure and over-fatigue. The amount of lymph on the surface of the pleura had probably been considerable, and it is only slowly absorbed.

Of the other physical signs which persist after the crisis, the most marked is the impairment of the note on percussion. The note depends (1) upon the physical structure of the thoracic wall; (2) upon the contents of the pleura and on the condition of the lung—whether it is solid or vesicular; another important factor is (3) the tension of the lung itself.

Pneumonia diminishes the nutrition of the elastic fibres, and so diminishes the elasticity of the lung; the tension is very much lowered, and may remain impaired for many months. Therefore, after severe pneumonia there may be an impaired note with deficient breathing over the seat of the mischief, due to deficient elasticity of the lung, which may last for a long time.

It occasionally happens that the moist condition of the lung, together with the defective movement, leads to a secondary catarrhal process and a consequent fibrosis, but such is rare. In some cases the fibrosis is an acute process, and is not due simply to the stagnation of the alveolar contents. We have recently had a boy who was admitted with great cyanosis, and had had pneumonia twice previously, in whom pneumonia in the left lower lobe was followed by a gradual consolidation of the upper lobe. We were rather inclined to consider the explanation would be found in phthisis, but at the post-mortem we found that an acute fibrosis of the left lung had taken place. The pneumonia,

instead of clearing up, was followed by a gradual organisation of the cells in the alveoli, which had become fibroblasts, so that the left upper lobe had become pigmented and absolutely solid. The right ventricle was enormously dilated and hypertrophied, and contained an ante-mortem thrombus.

Sequelæ.—Acute as is the onset of pneumonia, no less rapid is the disappearance of the exuded products. These sometimes amount to one or one and a half pounds, and may entirely clear away in less than forty-eight hours. But, occasionally, the pyrexia either persists, or after having fallen somewhat, again rises, and is irregular. The most common cause is an empyema. As the consolidation disappears, instead of the patient recovering his health, the temperature remains more or less erratic, and gradually the dulness increases at the base, while after a time a skodaic note develops above, the breath-sounds become more faint, and after a time the viscera become displaced by the development of an empyema. This condition is particularly common in children, and occasionally occurs as a result of a pneumococcal infection without any preceding consolidation of the lung; but in the majority of cases there is preceding consolidation. The characteristic feature about the fluid which is obtained in these cases is the presence of a large amount of lymph, which may sometimes be pulled out in large masses, and is never produced to this extent except by a pneumococcal infection.

The fibroid organisation of the lung, which followed on pneumonia in one of our patients referred to above, is a very rare event.

In a certain proportion of cases in which the temperature tends to persist, and more particularly in those in which it has not at any time been very high, say 101°–102°, so that the process does not seem to have been very acute, and in which the disease has run a slightly abnormal course, the abnormality will be due to the patient having also a tuberculous infection, and gradually phthisis will spread in the lung and become quite obvious. In such cases, do not suppose, that the pneumonia has gradually become tuberculous. Tubercle necessarily implies a specific infection; there has probably been a quiescent unnoticed patch of tubercle in the lung which has impaired the vitality of the patient; he became infected with pneumonia, and, when the attack cleared away, the tuberculous process made rapid strides. The fibrinous exudation that takes place in pneumonia is an excellent medium for the development of tubercle bacilli, and a very rapid caseation followed by cavitation due to the bacilli, may take place throughout the area which was previously affected with the pneumonia. A similar rapid appearance of the physical signs of phthisis takes place after hæmoptysis, the tubercle bacilli developing amongst the blood-clot and leading to acute destruction of the lung.

It is most important whenever pneumonia runs an abnormal course, to watch for the possibility of there being some latent, underlying tuberculous process.

There is still a divergence of opinion as to whether a pneumonic process which passes on from red to grey hepatization, is ever recoverable. It is impossible, I suppose, that the question can ever with certainty be solved, but there certainly seems evidence that cases which correspond to grey hepatization, and some even which have gone on to abscess and to gangrene have yet recovered. Practically, the main distinction between grey and red hepatization is the extreme pressure in the lung which has squeezed the red corpuscles out of the capillaries to such an extent than they no longer give to the lung its red colour.

Purulent infiltration, undoubtedly, is a very fatal condition; it occurs especially in those cases in which liquefaction of the exudation has taken place, but the powers of the patient have not been sufficiently great to enable him to expectorate.

Gangrene of the lung is very rare, but occasionally vessels are thrombosed in the consolidated patches and the lung may, in consequence, become gangrenous. A certain number, however, of cases of gangrene of the lung, are due to pneumonia starting around a bronchiectasis.

Bronchiectases are very suitable sites for organisms to live in and propagate, and, when infected with putrefactive organisms, they give rise to gangrene.

As a rule in pneumonia, the *sputum* is extremely viscid and rusty, and may be present quite early; less often it is entirely absent. Occasionally the expectoration consists almost entirely of pure blood: such cases imply an extremely engorged lung and an over-distended right side of the heart, they are always grave, but some do well.

There is another kind of expectoration which is sometimes described as "prune juice," it is a very dark-red, watery expectoration. It is a very fatal sign, or, at any rate, the condition is one from which patients very seldom recover.

Treatment.—There is no disease in which a dictum of Sir William Gull holds more true

than in pneumonia—that "it is not the disease which you have to treat, but the patient." Practically, your treatment varies much more with the physical constitution and the character of the patient than with the physical signs. The most important of all is, put the patient into bed. Patients with pneumonia, who are allowed to keep about, are apt to have a much more grave illness than those who are early confined to their bed. In all these acute conditions, even before you give any definite diagnosis, it is most essential that your patient should remain in a room, with a temperature kept at 60°–65°F., and in bed.

Pneumonia runs a much more favourable course when it is treated with plenty of fresh air, in a large room, with the window opened, taking care that the patient is not exposed to a direct draught. You cannot fight too strongly against the popular custom of heaping up clothes on the patient, stopping up every crevice for ventilation and fouling the atmosphere of the room with the waste products of oil lamps, gas stoves, and a crowd of friends.

In many the skin is dry and pungent at the outset, and very often a poultice or hot fomentation will moisten the skin, relieve the distress, and give a great deal of comfort. But increasing experience shows that a continuation of poulticing throughout the whole of pneumonia, although very common, is not to be recommended. To begin with, it disturbs the patient to have the poultices constantly changed, which is necessary if they are to be warm. If there is one rule that might be laid down more strongly with regard to the treatment of pneumonia than another, it would be this: whatever you do, if the patient is at all seriously ill, do not pull him about to examine him thoroughly as to the physical signs. Your line of treatment does not depend on whether the amount of consolidation is small or great. I have known of patients dying within an hour or two after they have had their chests thoroughly examined. This is absolutely bad treatment. You had far better remain in ignorance as to the changes going on, than sit a patient up, expose his skin to chill, and exhaust his heart. The same applies with regard to poulticing. One objection, then, to poulticing, is that you disturb the patient; another is, that, if the poultice is at all heavy, it throws a large amount of extra work on the respiratory muscles, and the amount of this increased work, particularly in small children, is a very serious item. Still, at the outset a poultice gives great relief, and is undoubtedly of value. The rule, then, may be that when the dyspnœa is urgent and the skin dry, you can afford relief with a poultice or fomentation by inducing the skin to act and keep moist. But, when once the skin is moist, it is more than dubious whether there is any advantage to be derived from poulticing; the patients do far better with a cotton-wool jacket.

The question of an ice-poultice is one upon which there is a divergence of opinion. It very often gives great relief, and may for that reason be used, but, here again it is most important that it should be applied without disturbing the patient. An ice-poultice is also of value by bringing down the temperature. A large ice-poultice over the abdomen will lower the temperature a degree or more persistently, and in children there is much to be said in favour of ice-poultices over the affected area of the lung. In old or feeble people they are absolutely unsuitable; and always be careful not to put an ice-poultice over the heart when there is much cardiac failure. Sponging the limbs and body without disturbing the patient should be carried out twice a day at least.

Pneumonia is an infective process, you therefore realise that it must run its course, and there is no method of treatment which we at present know of, that is capable of cutting it short. Nevertheless, in many ways great relief may be given. At the outset, when the pain is very intense, nothing is better than a mustard poultice over the seat of pain; while the patient may be given a dose of Dover's powder or opium; and the seat of pain may be strapped to keep it quiet. In the case of a vigorous adult with the agonising pain of diaphragmatic pleurisy, a few leeches may be applied.

It is comparatively rarely that venesection is needed. A patient with an enormously distended right heart, with a very feeble pulse, with a great amount of general bronchitis, and in whom the attack has come on very acutely, may undoubtedly receive great relief from venesection if he is strong and vigorous. But generally the distress is rather due to the intense pain induced by respiration than to anything else, and may be much better relieved by a dose of morphia. Moreover, if the patient is at the onset of a severe illness, you impair his nutrition by removing over eight or ten ounces of blood. It is, therefore, very rarely indeed that venesection is necessary. At the outset, for the first twenty-four hours, you may add to the comfort of the patient and induce the skin to act by giving him tincture of aconite, sweet spirits of nitre and acetate of ammonia;

but afterwards there is generally nothing to be gained by keeping on with this.

Expectorants.—In a large number of cases, as already pointed out, the exudation is absorbed through the lymphatics, and is not expectorated. Practically, there is no advantage in giving expectorants or cough mixtures such as are habitually administered with advantage for bronchitis, because the process is a specific infective one and is not a catarrh.

The majority of the fatal cases die from cardiac failure rather than from respiratory trouble; the two, of course, are connected together, but the great indication is to keep up the energy of the heart.

The patients who give rise to most anxiety are (1) those in whom the respiratory vigour is very feeble, because when feeble the pulmonary circulation is impeded, and the heart does not receive the assistance which it normally derives from respiration, and consequently the right side becomes over-distended.

Some of the cases which give the greatest anxiety are those of very young, ill-nourished and rickety children, who have collapsable chests owing to the malnutrition of their osseous system. Instead of the chest expanding properly with inspiration, the sides fall in, and the circulation consequently is not assisted. Similarly, a patient with ascites, or a stout man with a large abdomen who cannot move his diaphragm vigorously, has defective respiration. Patients with inelastic emphysematous lungs, very old people, pregnant women, and persons who have previously suffered from some chest disease, such as phthisis, and whose respiratory movements may be scarcely noticeable — all these are patients with whom you are likely to have great trouble, should they have an attack of pneumonia. (2). Cases of heart disease, more particularly mitral stenosis. Perhaps the most important group of all, (3) those who have a heart muscle poisoned by the constant use of alcohol. The majority of the patients admitted into the wards for pneumonia are alcoholic.

Sometimes at the very onset the pulse is up to 120. Any man at the onset of an attack of pneumonia who has a pulse of 120, is in a very grave condition, and a very large number of such cases are patients whose heart muscle has been for months poisoned with alcohol, and in whom it is very difficult to keep the heart going, in consequence of its degenerate condition.

(4). The remaining group consists of those whose excretory organs, viz., the kidneys and the liver are defective. Pneumonia is not inrequently the terminal scene in nephritis.

When the respiratory vigour is defective, it is very difficult to do much to improve it, and most of your attention must be directed towards stimulating the heart.

In some, dyspnœa is due to great pain, and inhibition of respiration is the consequence. In others it is due to the toxic effect of the pneumococcal poison. It is comparatively rarely that patients die on account of the extent of the lung which is affected with pneumonia; they die much more frequently from the virulence of the poison.

Another cause of dyspnœa is an over-dilated right ventricle. When the right ventricle becomes very much dilated there is a reflex dyspnœa which may become very urgent. Such a condition is benefited by tincture of belladonna or liq. atropinæ. An œdematous condition of the lung in which râles will be audible over the apices as well as the bases may also be much improved by the administration of belladonna.

For the relief of cardiac failure the most useful drugs are undoubtedly stimulants and strychnine. Strychnine is an extremely valuable drug; so also is caffein. They may be given subcutaneously or by the mouth, and before the patient's condition becomes too critical. These two drugs are not necessary in mild cases of pneumonia but only in the more severe ones, and they should be given fairly early. The inhalation of oxygen at frequent intervals often gives great relief, and acts largely as a cardial stimulant. Ordinary cases require no *stimulants*, nor do most attacks in the early stage, even when severe. But to a certain number of patients it is absolutely necessary, towards the middle of the disease, to give either brandy, champagne or ammonia. While ammonia is an extremely valuable drug, it cannot be given persistently in large doses without disturbing the condition of the stomach. Occasionally it may be necessary to give a very large amount of alcohol for a few days, and especially at the crisis, at which time many patients die, and a falling temperature with a rising pulse is an unfailing indication for more stimulant.

Comparatively rarely will you find that there is any advantage in giving more than six or eight ounces of brandy daily. The only exceptions to this rule which I would make are cases of pneumonia in acute rheumatism, where you not infrequently have associated pericarditis, endocarditis, extensive pleurisy and double pneumonia, a condition which, at first sight, you would think must necessarily prove fatal. Yet

almost all such cases that I have seen have recovered when they have taken a large amount of stimulants.

Digitalis.—Digitalis is the most valuable cardiac tonic we possess for a healthy heart-muscle which has been called upon to perform extra work and requires stimulating, particularly when dilatation of some of the cavities has ensued. This stimulation will lead to hypertrophy and increased efficiency of the muscle. But when the heart-muscle is poisoned or degenerate, digitalis is not nearly so efficient, and stimulants are far more potent in improving the cardiac efficiency. In the last stages of heart disease, where the muscle is degenerate, digitalis is of little value. In pneumonia the heart may fail from three main causes. First, as the result of the obstruction to the pulmonary circulation by the consolidation of the lung and the defective respiratory movements, and the consequent dilatation of the heart which ensues. In such case the heart will benefit by the administration of digitalis. It may also fail from a persistent soaking in alcohol which has been going on for years, and has led to a degenerate condition of the muscle. Or it may fail from the toxic effects of the pneumonia poison. In these two last-mentioned conditions there is but little appreciable advantage to be gained by giving digitalis.

Another question, which is not by any means finally settled, is the use of opium in pneumonia. There is no question whatever that at the onset opium is simply invaluable. When patients are first taken ill with severe pleuritic pain, intense dyspnœa or insomnia, a dose of Dover's powder, or an injection of morphia will give great relief and be of the greatest benefit. It is very important, in the early stages, to induce a good sleep in order that the patient's nutrition may be kept up for the later part of the illness; but after the later portion of the first week of the illness, it is extremely doubtful whether opium should be given. If then given it must be with the greatest caution. There is no doubt that when a patient extremely ill, towards the end of a pneumonia, has an injection of morphia, it often affects him injuriously. The delirium at the onset of pneumonia is a toxic delirium and is often relieved by opium. The delirium in the later stages of pneumonia is due to weakness and failure of nutrition, and will not be improved by opium, but will be benefited by stimulants. You are much more likely to relieve distress and give rest to a patient in the later days of pneumonia by avoiding opium, because giving it even in moderate doses very often diminishes the respiratory vigour and tends to increase the troubles of the patient. So that the rule which may be laid down would be, that while occasionally opium is permissible in the later stages of pneumonia, it must be very exceptionally, and generally it is wiser not to give it.

As to antipyretics, I think we may condemn their use in pneumonia without hesitation. Because a patient has pyrexia, it by no means follows, that giving him another drug which results in bringing down his temperature, necessarily thereby improves his condition; as to produce a sufficient result, large and repeated doses must be administered, which produce injurious results on the blood, etc. The combined effect of two poisons may produce a normal temperature, but more probably than not, the later condition of the patient will be worse than the first. There is no doubt that at the onset a dose of antipyrin and salicylate of soda will relieve the distress and make the patient more comfortable; but their continued use throughout an attack is injurious.

Quinine is given in a considerable number of cases, but we have no evidence that there is any advantage in giving it in excessively large doses. A dose of 1½ grains, three or four times a day often seems to improve the condition of the patient, but there is comparatively little evidence in favour of the heroic doses which used to be given a few years ago.

Practically, our treatment of pneumonia is empirical and largely one of symptoms, and until we can obtain an efficient anti-pneumonic serum, we shall probably not make any great advance in the treatment of the disease. Professor Pané, of Naples, last year was able to prepare a serum which was so far efficient, that it was an effectual prophylactic, and some seventy cases treated in Naples with it, had a lower mortality than the average. He was kind enough to supply me with a quantity, and although we have used the serum in a number of cases, the most severe ones do not seem to have been appreciably benefited. At the same time, there were two or three in which the distress and the symptoms immediately abated, and the patients were much better, although the physical signs continued to develop without any check. Ultimately we shall be able to obtain a more efficient serum, but so far as the serum which we have at present is concerned, its use is still in a probationary stage. It is certainly of no use unless given at an early period of the disease, and even then its value is somewhat problematical.

Hospital News.

CLASSIFIED LIST OF CASES.

In the Medical Wards.

CASES UNDER DR. TAYLOR.

MARY 38. Typhoid.
39. Enlarged heart. Mitral stenosis. ? Fibroid lung.
40. Typhoid. Peripheral neuritis.
41. ?
42. ?
43. Aortic and mitral stenosis and regurgitation.
44. Chlorosis.
46. ? Malignant growth of uterus.
47. ?
48. Hæmaturia.
56. ?
Cot 57. Pleuritic effusion following pneumonia.
PHILIP 21. Pneumonia.
22. Phthisis.
23. ?
24. ? Growth of stomach.
26. Double mitral disease.
27. ? Typhoid.
28. Mitral stenosis and regurgitation. Chronic peritonitis. Ascites.
29. Mitral stenosis and regurgitation.
30. Chorea.
31. Tubal nephritis.
32. Old right pleurisy. Left pleurisy with neuritis.
33. Lead colic.
34. ?
37. ? Fractured ribs. Pneumonia.
38. Abdominal abscess.
39. Pseudo-hypertrophic muscular paralysis.
40. Acute rheumatism. 3rd attack.

CASES UNDER DR. HALE WHITE.

MARY 13. Mitral regurgitation.
14. Abdominal tumour. ? Kidney. ? Stomach.
15. Mitral regurgitation. Enlarged liver.
16. Cerebral tumour. Operation.
17. Typhoid. Convalescent.
18. Acute rheumatism. Mitral stenosis and regurgitation.
19. Typhoid.
20. Typhoid. Convalescent.
21. Hæmatemesis.
22. Carcinoma of cervix. Secondary deposit in spinal cord. Incontinence of urine.
23. Peliosis rheumatica.
24. Diabetes mellitus.
MARY Cot 53. ?
Cot 54. Posterior basal meningitis. Recovery.
PHILIP 1. Acute nephritis.
2. Mitral stenosis and regurgitation. Pulsating liver and tricuspid regurgitation.
3. Diabetes mellitus.
4. Phthisis. Fibroid lung.
5. Acute and chronic nephritis.
7. Typhoid. Convalescent.
8. Typhoid. 3rd relapse.
9. Epilepsy.
10. Phthisis. Tuberculous laryngitis.
11. Epistaxis. Local cause.
12. Broncho-pneumonia.
13. Mitral regurgitation. Albuminuria. Enlarged liver.
14. Typhoid.
15. Chronic interstitial nephritis.
16. Fits. ? Cause.
17. Phthisis. Fibroid lung.
18. Epithelioma of œsophagus. Carcinoma of pylorus. Enterostomy.
19. Gonorrhœal arthritis. Secondary syphilis. ? Lardaceous disease.
20. Acute rheumatism. Mitral regurgitation.

CASES UNDER DR. PERRY.

MARY 2. Chlorosis.
3. Chlorosis.
4. Morbus cordis. ? Bright. ? Rheumatism
5. ? Typhoid. ? Puerperal septicæmia.
6. ? Neurosis.
7. Gastric ulcer. Mitral disease.
8. Eczema.
9. Double mitral disease.
10. Chlorosis.
12. Puerperal neuritis.
Cot 52. ? Meningitis.
STEPHEN 3. Rheumatism.
4. Rheumatism. Aortic disease.
6. Enteric.
9. Dilated stomach.
11. Spastic paralysis of legs.
14. Hodgkin's disease.
18. Pneumococcal empyema.
19. Rheumatism. Mitral incompetence.

CASES UNDER DR. PITT.

MARY 27. Enteric.
28. Mitral and aortic disease.
29. Tubercular peritonitis.
30. Gall-stones.
31. Chorea.
32. Pleural
34. Congenital hemiplegia.
35. ? Dilated stomach. Dyspepsia.
36. Empyema.
37. Acute rheumatism. Endocarditis.
Cot. Meningitis.

STEPHEN 21. Laryngitis and bronchitis.
22. Acute strangulation by intestinal band. Operation.
23. Acute rheumatism. Mitral disease.
24. Gall-stones.
25. Enterica.
27. Hemiplegia.
28. Hardbake spleen.
29. Bright's disease. Pleurisy and pericarditis.
31. Phthisis and peripheral neuritis.
32. Nervous condition.
33. Influenza.
34. Intestinal obstruction. Operation.
35. Acute rheumatism.
36. Exophthalmic goître.
37. Phthisis.
38. Disseminated sclerosis.
39. ? Cerebral tumour.
40. Multiple melanotic sarcomata.
COT. Pneumonia.

Nursing News.

MATRON'S OFFICE.

On December 27th Nurse K. Taylor left the hospital to take up nursing work at Cheltenham, and Probationer Hindley was appointed to succeed her as Head Nurse in Stephen ward.

On December 29th Probationer Minshall was appointed Head Nurse in the Surgery on day duty.

On December 31st Nurse Jeffery left the hospital, and Probationer Tompkins was appointed to succeed her as Head Nurse in Patience ward.

On December 31st Nurse F. Brown (Head Nurse in Lydia ward) left the hospital on completion of her training to take up the appointment of Sister at the Convalescent Home, Walton-on-Thames. Nurse Goodwyn, Head Nurse in the Theatre, has been transferred to Lydia, and Nurse Ramsey from the Eye wards to the Theatre.

On December 31st Nurse Overbury (Head Nurse in Astley Cooper ward) left the hospital on completion of her three years' training, and Probationer A. Field has been appointed to succeed her as Head Nurse in Astley Cooper ward.

ACKNOWLEDGMENTS.—Books received, in addition to usual magazines:—Diseases of the Anus and Rectum, by D. H. Goodsall, F.R.C.S. Eng., and W. Ernest Miles, F.R.C.S. Eng. Published by Messrs. Longman, Green & Co. 7s. 6d. net.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

South African Memorial Fund.

DEAR SIR,—I have to-day received the GAZETTE for October 27th in which you solicit subscriptions for a memorial to Guy's men who have given their lives for Queen and Country.

I hope I am not too late, but news only reaches us late and intermittently. I enclose a cheque for £10. You may have some difficulty or unseen delay in negociating it, but it is the only means I have of sending money safely. The Standard Bank has an Agency in London.—Yours truly,

GEORGE TURNER,
(Temporary) Medical Officer of Health,
Pretoria, December 7th, 1900. Transvaal.

DEAR SIR,—I beg to enclose a cheque for £1 1s. towards the South African Memorial Fund. As you ask for suggestions as to site, etc., I would suggest a monument be erected in the Park, where it will be seen both by patients and students. In my opinion the Chapel would be too exclusive a spot, where it would not be generally seen, Yours faithfully. H. HORE,
Sitapur, India, 4th Dec., 1900. Major R.A.M.C.

Association Football.

DEAR SIR,—I hope you will spare me a few lines of your very valuable space in your next issue. Now that the Christmas vacation is passed I should like to draw the attention of "Soccer" men to the fact that the cup ties are at hand, and to urge every man who plays to try and get as much training as he finds he has time for. This does not only apply to those who play in the team, but to any man who plays the game at all. It is a great help to be able to get up a scratch game, even if it only be for half an hour; and if men will only turn out at the ground together this can easily be arranged. The "Soccer" results for the season up to date have been well above par, only one match being a loss. Two much confidence, however, has lost many a match, so let not the former glory stand in the way of future work or the cup may still shun Guy's.—Yours truly,

W. M. ROBSON (Captain).
Guy's Hospital, S.E.

A Motto for the New Year.

DEAR SIR,—During the greater part of the year, one's tone of mind is allowed to vary. But at this season there must be no doubt, no hesitation. At the beginning of a New Year every true Englishman loftily reviews his

own defects, his neighbours' wickedness, and makes resolutions accordingly. It is the standard amusement of the nation.

Wherefore I now crave permission to point out a serious and growing danger in our little world at Guy's, so that the resolution of others may stamp out the evil.

I refer, Sir, to the habit of limiting general conversation almost entirely to matters of technical and professional interest. Surely the *sesquipedalia verba* of our craft are not suited to small talk. It is a regrettable fact that one can always "diagnose" a medical student after five minutes' conversation with him. Does not the social life of a Londoner hold enough of import to chat about apart from medical matters?

Listen to Dr. Johnson:—"It is the essence of a gentleman's character to bear the visible mark of no profession whatever."

Yet what an empty platitude would be the days of a medical ward clerk if he did not carry a stethoscope guilessly unconcealed.

One envies the mind of Keats, who could put the finishing touches to a new poem while performing a delicate operation.

Dr. Johnson's dictum is, in effect, a plea for more general reading, for wider sympathies. The matter concerns us deeply. Less of the shop, gentlemen, less of the shop.—I am, Sir, yours, etc. D.

Infective Endocarditis.

SIR,—Mr. Hodgson, in his comprehensive paper upon Infective Endocarditis, states that he has been unable to find an explanation for a "discrepancy in percentages." Some of the percentages to which he refers seem to show that infective endocarditis attacks valves which are already the seat of old lesions, while others suggest very strongly that healthy valves are most commonly affected.

For some years past it has seemed to me that morbid anatomists may have been mistaken in looking upon the thickening and deformity of valve segments commonly seen in infective endocarditis as evidence of disease present in the valves before they were attacked by micro-organisms. Pathologists of past years looked upon infective endocarditis as an acute disease, and consequently generally attributed chronic changes present in the valves to other influences. It is now known, however, that infective endocarditis is by no means always an acute disease. Temperature charts have been published showing that it may last at least a year, and many of us no doubt have seen cases which we have known to have existed for months. In these cases, after death, we find not only the characteristic vegetations, but much thickening of the valve segments. Evidence may also be present of extensive ulceration which has healed. In our museum are two specimens, which I have mounted to show this healed ulceration.

I trust it will not be out of place to quote from a description of infective endocarditis which I have placed by our museum specimens of this disease, in order to aid students in their examination of them. My comment upon the thickening of valve segments is as follows:—"Most morbid anatomists consider that infective endocarditis generally occurs in previously diseased valves. Valves weakened by previous inflammation one would expect to be more vulnerable to the attack of microbes, but I doubt whether healthy valves are so infrequently attacked as some pathologists think to be the case. The thickening of segments of a valve seen in infective endocarditis is undoubtedly often the result of this endocarditis, not of a previous attack of simple endocarditis."—I am, etc., THEODORE FISHER.

Clifton, Bristol, Jan. 1st, 1901.

Guy's Hospital Debating Society.

TWO most successful meetings of this Society were held during last term, October-December, 1900.

At the first, which took place on Saturday, October 27th, being the opening night of the session, 1900–1901, the chair was taken by Dr. Pavy. The question discussed was to the effect "That this House regrets that the Government has sacrificed domestic policy to Imperial interests in their administration in their recent appeal to the country."

MR. WACHER supported the motion in an opening speech full of smart witticisms and theatrical bombast.

MR. THOMPSON opposed with much force of voice as well as words.

The debate was well supported by Messrs. Wacher, Wales, Hodgson, Lewis and others, in which personalities were somewhat freely indulged in. The motion was eventually lost by a majority of 15. Over 100 members were present, including the three vice-presidents.

The second meeting took place on Saturday, December 1st, with Mr. Pakes in the chair, when the Society, for the first time, attempted to wear the dignified cloak of the House of Commons.

The Vice-President took the chair at 8 p.m., and started with surprise to find himself Speaker. Rallying himself, he called on the Secretary to read the minutes. The inevitable apology followed that the Secretary had relied on a distinguished member, a former Secretary (groans), for the publication of the last debate in the GAZETTE (shame). In a voice broken with emotion he confessed that he had leant on a "bruised reed which had pierced his hand." (Laughter and "name.")

The House was opened, and question time began. The House was agitated when the opposition, in tragic tones, related the story of the Bethesda Quarry, and asked for a reply. In a perfectly official cut-and-dried tone an absolutely irrelevant answer was given.

Through mazes of questions and answers the House finally arrived at Committee of Supply, Messrs. Lewis, Thompson and Wales having earned the greater part

of the applause. On a vote of 40 millions to finish the war, a good debate took place, the Secretary for the Colonies being particularly to the fore on the burning of farms and alleged outrages. The debate was sustained with spirit by Messrs. Thompson and Lewis, and after a speech from the Secretary for War, which carried weight, the Leader closed the discussion with a speech in his own peculiar style, which was very well received.

But trouble was in store for the Government. They were severely heckled over the vote for the President of the Board of Trade, and the vote was only just carried after he had cheerfully offered to accept the reduction of 6d. moved from his salary of £10,000, a point of constitutional practice which sorely tried the knowledge of the oldest parliamentary hands, some maintaining that the Government were actually defeated without any vote having been taken. Serious as this episode was, the next terminated in a catastrophe. The Home Secretary was rather prolix and humorous in his reply and the House liked it not at all, and the Leader catching the growing wrath on the benches below him, publicly announced his intention of elevating the Home Secretary to another place, an expedient bold, but, made too late, and the House visited on the Government their wrath at the Home Secretary's levity, defeating it by a large majority, with the result that the House adjourned, to meet again under Liberal auspices. Altogether, it was a very successful debate.

Leader of House, J. M. Brydone; Secretary for War, S. Hodgson; President of the Board of Trade, E. G. Wales; Home Secretary, S. Pearson; Colonial Secretary, F. G. Gibson. Leader of Opposition, W. Colin Lewis.

Pass List.

University of Cambridge, December, 1900.

THIRD EXAMINATION FOR MEDICAL AND SURGICAL DEGREES.

PART I.—H. S. A. Alder, E. H. Kitchin, N. F. Ticehurst, E. G. Wales.

PART II.—A. H. Davies, G. S. Graham-Smith, L. Wilkin.

SECOND EXAMINATION.

PART I.—A. Morris, B. H. Stewart.

PART II.—S. W. Cole, J. Goss, T. C. Lucas.

School Examination in Elementary Anatomy, December, 1900.

R. Edridge, J. A. C. Greene, J. O. Musson, L. Myer, C. W. R. Preston, T. F. Wilson.

Test Examinations.

CHRISTMAS, 1900.

ANATOMY.

Maximum marks 120.

SECOND YEAR'S MEN.—H. Bell-Walker, 88; G. Russell, 87; J. H. Clatworthy, 86; J. Cook, 83; H. H. Carter, 78; M. G. Louisson, 76; J. M. Pollard, 71; G. Hamilton, 67; H. H. Jenkins, 67; R. Felton, 67; R. M. Rendall, 66; A. E. F. Kynaston, 65; C. P. Harvey, 61; G. C. F. Robinson, 60; A. Leeming, 58; P. F. Minett, 57; J. D. Thomas, 56; J. E. Spiller, 56; A. R. Beaumont, 55; A. M. Roome, 54; W. T. Meade-King, 53; R. O. Williams, 52; W. N. May, 48; H. D. Wyatt, 43; C. J. Dismorr, 38; H. P. Costobadie, 34; G. H. Cheyney, 30; J. E. Prentis, 29; J. M. Barrionuevo, 28; R. P. Rowlands, 24; W. Reeve, 23.

ANATOMY.

Maximum marks 120.

FIRST YEAR'S MEN.—A. G. Jones, 92; M. de L. Robinson, 84; E. Bellingham Smith, 84; A. B. O'Brien, 82; T. Turner, 80; A. D. Crofts, 78; G. N. Bartlett, 77; E. H. Adams, 76; W. P. Purdom, 72; W. Welchman, 72; I. R. Cook, 69; H. A. Watney, 67; F. H. Lennox-Jones, 67; H. S. Knight, 64; E. W. Routley, 61; R. J. Bentley, 56; R. W. Allen, 55; J. B. Ball, 52; H. V. Mitchell, 52; S. M. Wells, 46; F. M. Longson, 44; A. B. Cocker, 42; S. Tinsley, 37; A. L. Morgan, 34; J. F. Smalley, 27; E. White, 24; E. F. Milton, 18.

DENTAL CLASSES.

Maximum marks 100.

FIRST YEAR'S MEN.—J. G. Morrell, 89; F. N. Fox, 84; H. P. Aubrey, 77; H. S. Cranston, 76; R. W. Jones, 76; C. J. Lamb, 75; J. S. Francis, 55; R. H. C. Johnson, 55; T. H. Griffin, 45; P. J. Phillips, 42; N. James, 41; J. S. Shoveller, 41; H. W. Gwyther, 40; W. R. Penford, 37; H. J. Cole, 33; W. Reynolds, 32; J. Stevens, 32; W. R. Ransford, 27; W. S. Stevens, 24.

Papers by Guy's Men.

The Condition Three Years after Operation of Fifty Successful Ovariotomies. By John D. Malcolm, M.B., C.M., F.R.C.S. Edin.—*Lancet*, 15th December.

A Clinical Lecture on Polyorromenitis or Combined Serous Inflammations. By Frederick Taylor, M.D., F.R.C.P.—*British Medical Journal*, 15th December.

What is a Disease? By S. W. McIlwaine, L.R.C.P. Lond., M.R.C.S.—*Ibid.*

Some Points in the Treatment of Spinal Abscesses. By A. H. Tubby, M.S. Lond.—*British Medical Journal*, 22nd December, 1900.

Sarcoma of Kidney. Nephrectomy by Langenbuch's Method. Recovery. By T. A. Buck, M.B. Lond.—*Ibid.*

With Dr. Savage at Bethlem Royal Hospital.—*Clinical Journal*, 2nd January, 1901.

Passim.

CHRISTMAS has come and gone. Everything has gone off with perfect satisfaction to everyone. There has been no hitch in the preparations which are involved in the celebration of Christmas-time in such a large institution, and all those who have taken an active part in the several proceedings are much to be congratulated on the successful issue to which the festivities have been brought.

THE hospital has once more been garbed in green and fairy-lights, once more the strains of music have issued from every corner of the hospital during the festive week, and once more it has returned to its normal aspect, and we venture to think that everyone feels the happier for the spirit of goodwill that has reigned throughout.

AN account of the round of the Niggers on Christmas Day, of the Children's Tea, and of the succession of concerts in the several wards, will be found elsewhere. As on previous occasions, a large number of outside friends, including many professionals, offered their services and helped to make the performances of a very high order. We would specially offer our thanks to Miss Gilman, from the Shaftesbury, who delighted the audience in several wards with her charming voice, to the Misses Murray and Miss Moyse, from the Savoy, and to Mr. R. Green, Mr. Capper and many others.

THE local talent was well represented at most of the concerts. Special praise and thanks are due to Mr. Holmes for the indefatigable and most efficient way in which he performed the office of accompanist throughout the whole series. Clinical ward, did not boast a concert, but the patients were regaled with music kindly provided by many friends, on three successive afternoons, on which occasions Sister Clinical played the rôle of a most hospitable hostess.

THE last night of the old year was celebrated round the statue of Thomas Guy in the time-honoured way with great enthusiasm. The illuminations were specially brilliant. Torches were erected at each corner of the statue, and a large bonfire, set up between the statue and the hospital, lit up the whole square with great effect. With some pains we have succeeded in obtaining the services of an artist of considerable repute with a view to presenting to the Guy's public a representation of this quasi-historic scene. He was an eye-witness of the scene, and hopes to make an effective picture for us. Though intended as a New Year's presentation, there will necessarily be some delay before we can place the reproduction before our readers.

WE have now entered upon a new year and a new century; may they bring prosperity to the hospital and all those concerned in it, and may it continue to be a centre of increasing activity and good work in the future as it has been in the past. WE publish elsewhere a resumé of the work of renovation, reconstruction and extension which has been going on in our midst during the past year. In all this work every endeavour has been made to avoid anything in the nature of patchwork, and initial outlay has not been spared, where by more extensive reconstruction, a simpler, more efficient and more economical system could be attained. A complete dove-tailing of the various mechanical systems into one another, has been the aim throughout.

THUS, with the Laundry, not only has the whole been reconstructed and remodelled, but sufficient driving power has been arranged for to work in conjunction with it the electric lighting and the heating of the hospital, and as far as possible, its own water supply. The way in which these various systems have been combined, appears to us so very interesting and instructive, that we propose later on to put before our readers a detailed account of the whole work. This amalgamation of the various parts into one whole, necessarily delayed somewhat the completion of individual items, but certainly in this case the means fully justify the end.

There is doubtless much yet to be done, but it is not too much to hope that very early in this century we may see the working of this hospital established upon a sound mechanical and financial basis.

IT is with much satisfaction that we are able to announce that the hospital will receive this year a further grant of £5,000 from the Prince of Wales' Hospital Fund, for the purpose of maintaining the current expenses of the year.

WE understand that the Matron, Miss Esther Young, has resigned her appointment, and that her resignation has been accepted by the Treasurer and House Committee. Miss Esther Young did excellent work as Assistant Matron for three years, and during the year she has been Matron she has shown much ability in the details of administration, and has maintained a high standard of discipline. We cannot but hope that no long time will elapse before Miss Young secures a congenial post in which these qualities will find a fitting recognition. Pending further arrangements Miss Hodges (Sister Bessie), Assistant Matron, has been appointed Acting Matron.

WE have it on good authority that Lieut.-Colonel Sloggett of the Imperial Yeomanry Hospital has been appointed Assistant Director General of the Army Medical Service. This appointment must be a source of great satisfaction to Guy's; for though not "by birth" a Guy's man, he has been associated so closely with the Guy's contingent in South Africa, and has worked in such perfect harmony with Guy's men and Guy's methods, that we cannot help taking a personal pride in his advancement; and we feel sure that the appointment augurs well for the future of the Army Medical Service. We offer him our most sincere congratulations.

WE publish elsewhere a letter of rebuke to the Guy's medical student on account of the zeal displayed by him for his work. Our correspondent tells us that he is so absolutely absorbed in it, that he can find no other subject for conversation. This is indeed a serious matter for the individual. We see in it the germs of monomania. Exclusive interest in one subject is undoubtedly warping to the mind, but surely it is preferable that a man's mind be taken up with one subject than devoid of any at all.

OUR experience may be unfortunate, but we have not found the average Englishman outside the medical profession so diffuse in information, or so ready in general topics of intelligent conversation. We venture to think that the average medical student is well up to the standard of general intelligence, and we congratulate him on being engaged in a work of such all-absorbing interest.

WE publish under Correspondence a letter from the captain of the Soccer team, in which he urges all those concerned to do their utmost to bring the Cup home to Guy's this year. We feel sure he will meet with a hearty response from his forces. We not only want to see the Soccer Cup this year in the smoking-room, but also the Rugger trophy. So buck up! ye valiant sons of Guy's, and let this first year of the century be one of crowning glory for Guy's skill and might in the sporting field.

WE offer our congratulations to Messrs. Carter, Hewitt and Fisk, who obtained the much-prized distinction of M.D. of the London University. We must especially congratulate Mr. Fisk, who, we understand, qualified for the Gold Medal. By a serious omission in the last issue the names of Messrs. Butler, Dunston and Eason were inserted without any intimation as to what distinction they had attained. It is the B.S. London on which we have to congratulate them. Mr. H. S. French is also to be highly congratulated on his qualification at Oxford with the M.B., B.Ch.

THE South African Memorial Fund has received the most substantial and liberal contribution of £10 from Mr. George Turner, Medical Officer of Health for the Transvaal, and we have also to thank Major H. Hore, R.A.M.C., for his contribution of one guinea.

We hope many more subscriptions may follow in the New Year.

WE would remind our readers that the annual subscription of seven shillings and sixpence to the Clubs' Union for the GAZETTE fell due on the 1st inst., and should be paid as soon as possible to Mr. S. H. Croucher, at the Medical School Office. An index and title-page for the volume just completed have been prepared and can be obtained from the Librarian. Subscribers can now have their sets of the GAZETTE bound at one shilling and sixpence a volume by leaving them with the Librarian. The binding is in two shades of blue cloth—navy blue or a lighter tint—with the arms of the Hospital in gold.

Christmas Week.

DECORATIONS.

WE heard much talk to the effect that the decorations of wards this year were to be altogether of a simpler and less elaborate description than on previous occasions, but we venture to think that the results belied the prophecy. The adoption of coloured electric lights in the wards wherever this was possible, added greatly to the general effect, and the light festooning with delicate threads of ivy, which was generally adopted in place of the older methods of heavy wreaths of evergreen of all kinds, produced an artistic picture which in some wards could not be surpassed. In Stephen ward, owing to the untiring energies of many workers, urged on by the enthusiasm and afternoon teas of a most persuasive Sister, the delicate nature of the decorations gave witness to the infinite pains that had been taken to convert the ward into a veritable fairyland. Mary ward is so very large that one could hardly expect it to compete as a whole with those of more limited space, but the canopy design in Dr. Taylor's division, and the bell-shaped festooning in Dr. Pitt's division were most effective, and when they were seen at their best and fully illuminated, it was admitted on all hands that they held the first rank. The elaborate designs over the mantelpiece in Dr. Taylor's division and at the arches, testified to the skill and labour which had been devoted to these quarters.

On the Surgical side we must specially refer to Cornelius and Luke for their brilliant illuminations with innumerable electric lights. We understand that all the lamps in one of these wards were kindly provided by Messrs. Edison & Swan, and it will be remembered that it was due to the kindness and generosity of these people that the wards of Mr. Golding-Bird were so beautifully illuminated last year. Effective as these coloured electric lights are for decorative purposes, we must confess that we have still a weakness for the old-fashioned Chinese lanterns. Perhaps it is the conservative spirit, the love for old things that are dying out, but the softness and warmth of the quiet subdued light given by these lanterns, seems to have a characteristic charm of its own. To us, therefore, the older wards, notably Patience and Samaritan, Job and Naaman still possessed their own peculiar fascination. Patience and Samaritan, unique in shape and form, was also unique in its decorations. A special feature of attention here for the visitors, consisted in a display of Boer arms, bandoliers, tunics and flags kindly lent by Mr. Fripp. Naaman had just become the happy possessor of the much-prized tug-of-war cup, and they were not backward in pointing out the fact to all comers. The cup was set up on a pedestal in majestic state surrounded by a wreath of laurels, and looked very happy.

In fact, each ward with its own special features and attractions showed that everything had been done to present as pretty a picture to the eye as the natural conditions of the place permitted.

THE DISGUYSED MINSTRELS.

In spite of the fact that the Disguysed Minstrels had this year lost the services of many of those who in former years had made the troupe famous Messrs. Holmes and Durbridge managed to get together a sufficient amount of combined energy and talent, to give quite an excellent afternoon's entertainment.

The approach of the Niggers was announced to the patients by a distribution of programmes of excellent and original design, kindly presented to the hospital, as heretofore, by Messrs. Ash & Co.

The troupe, led by "Pa" Durbridge, whose feet were quite a feature, I might say, burst into Ruth about 1.30 p.m. to the tune of—well never mind, suffice it to a tune. Za-zas wailed, banjoes twanged, bones clacked, whistles shrieked, and laughter reigned supreme.

Philip, Mary and Queen were trailed through, songs, banjo quartettes and wheezes being scattered right and left. Bright was reached, and tea—tea and the Nurses' ancient pastime of "Picking out the Niggers," was indulged in. Then away to Stephen, where a five act tragedy entitled "The of-Course-he-can Brothers; or Why?" was performed in fifteen merry minutes. Messrs. Hilton, Holmes, Brydone, Grey, Trail and Collins sustained the parts, and proved that whatever carping critics may say, the true dramatic spirit is not yet dead in England. Off again, and through Out-Patients, nearly torn to ribbons by excited millions of children, and then into Miriam, where our own Mr. Soper fiddled for all he was worth, while a coy negress in apple green danced the "Cant-Cant"—then John, followed by the excellent Clinicals whiskey and cigarettes, which so refreshed the now fairly travel-stained band, that they at once scaled the dizzy heights of Patience and Samaritan, sang songs, danced, acted without let or stay, down through Charity, Dorcas, Luke

and into Naaman, where the tragedy was again enacted with confident vigour. Job, Lazarus, Martha, Lydia (where Mr. Mullins' topical version of "Oh Lucky Jim," created much enthusiasm) and Corny were turned into temples of lyric art, and then came the end,—Astley Cooper, where a great reception was given the troupe, and the tragedy once more held an audience spellbound. "God save the Queen,"—a wash,—sand-paper,—pumice-stone—and dinner,—for the hour was eight of the clock.

THE OUT-PATIENT TEA.

The Out-Patient Tea on Christmas Day was, as before, a grand success. Well before the appointed hour a crowd began to collect outside the gates, and shortly after two o'clock 550 children sat down to tea in the Out-Patient Department, which could scarcely be recognised as such by the most familiar, such a change had been wrought there. This year the whole was lighted exclusively by electric lights of various colours, the necessary wires being tastily draped with red and white art muslin. The candles on the magnificent Christmas-tree gave place to small coloured electric lamps. This, we believe, is quite a novelty, and baffles description on paper.

After doing justice to an excellent tea, the children were marshalled to the farther end of the room for a Punch and Judy show, which met with its usual appreciation. After that, a new item was introduced into the entertainment—a cinematographic demonstration, which was received with delight by everyone. The noble patriotism of the Borough children was well shown by their shouts of applause at the appearance on the screen of each of our British generals and by their hoots for Mr. Kruger. As usual, the Nigger Minstrels came in and greatly amused the children by their grotesque costumes and faces.

At six o'clock the distribution of toys from the trees took place. Each child received, in addition to toys, a useful article of clothing and a bag containing tea, bread, sweets, apples and oranges and crackers.

Thanks are due to so many that we should take up too much space if we were to mention them individually, but we must especially thank Mr. Lafone for his generous gift of 100 lbs. of tea, Mr. Hawkes for the Christmas trees, Messrs. Southwell & Co. for their gift of 500 boxes of sweets, Mr. Hambro for the Christmas-tree, and last, but not least, the District Nurses who have helped us throughout with untiring energy. Throughout the preparation and on the actual day, Mr. Tom Lauder was greatly missed by all, but his place was admirably filled by Mr. Goble, to whom great credit is due for having filled so difficult a vacancy with such marked success.

The following friends kindly contributed clothes and toys for the children :—

CLOTHES.—Mr. R. E. Brayne, Mrs. Goddard, Mr. Targett, Mrs. and Miss Rogers, Miss Wright, Nurse Garnet, Miss Goble, Nurse Studdert, Miss Ruth Allen, Sister Naaman, Sister Lydia, Sister Charity, Nurse Bryan, Misses Whytehead, Mrs. McNeile, A Friend, per Nurse Cooper, Mrs. Pillen, Nurse Tubbs, Miss Ransford, Nurse K. Taylor, Sister Job, Nurse Backett, Mrs. and Miss Moore, Mrs. Hodgson, Miss Grace Allen, Nurse Alcock, Nurse Cotterell, Nurse Lamb, The Matron, Mrs. Poyser, Messrs. Tarn & Co., A Friend, per Nurse Spedding, Nurse Neald, Mrs. Landon, Mr. Stewart, Nurse Taylor, Mr. Lacey.

TOYS.—Nurse Archdale, Miss Iles, Nurse Taylor, Sister Bright, Nurse R. Thompson, Miss Tinsley, Miss Grace Allen, Mr. Goddard, Mr. Rogers, Miss Rogers, Mr. Wright, Nurse Worthington, Nurse Studdert, Miss Ruth Allen, Sister Naaman.

DOLLS.—Misses Whytehead, Sister Bright, Nurse Tubbs, Nurse Archdale.

CHARITY CONCERT.

To Charity ward belonged the honour of commencing the series of Christmas concerts this year. It took place on Boxing Day at 3 p.m. The ward itself—to use a hackneyed phrase—was tastefully decorated, the coloured electric lights looking particularly effective, while the consistent excellence of the whole entertainment was only equalled by its variety. Mrs. Cohen opened with German's "Country Dances," from Henry VIII., which sounded as well as ever. Mr. Bickerton was happy in his choice of "I can't think of nothing else but you," for a mandolin solo, while the melody of Mr. Edward Cohen's violin was anything but *broken*. Mandolin and violin subsequently joined forces in a pleasing trio.

Of the vocalists it is difficult to select the best where all were good, but Miss Florence Shee's stirring rendering of "Motherhood" was perhaps the most appreciated, and was followed by the peaceful "Husheen," as an encore. We liked Miss Josephs best in "Vainka's Song," while Miss Swan and Mrs. Bovill were both in turn admirable. Messrs. McD. Parrott and Denyer were both thoroughly enjoyed, the latter being heard to better advantage in his second effort, "On the Road to Mandalay."

The second part of the programme was entirely given up to an exhibition of the regular old-fashioned conjuring which one too rarely sees, by Signor Whitolini Diabolo—an exhibition as remarkable as the professor's name. We found kittens in balls of string, a glassful of water apparently growing from the "assistant's" neck; we saw a great Union Jack made before our eyes from three little pieces of paper.

This brought to a close an admirable entertainment, and many thanks are due to all who assisted thereat.

STEPHEN CONCERTS.

Through the kindness of many professional ladies and gentlemen a really excellent concert was provided here on Boxing Day, the items on the progamme being of such variety as to suit all tastes. When the ear tired of the musical feast there were the decorations to soothe

the eye, and assuming both these senses might be blunted, the house physicians had provided a series of conflagrations to illustrate the excellent training of the nurses in fire brigade duties.

Space would not allow of a minute account of the programme, and the excellence of the artistes makes criticism almost impossible.

Miss Helen Jaxon gave a charming rendering of Gounod's Serenade, and delighted her hearers with "Abide with me," being compelled to follow this with German's "Sweet Lavender" as an encore. Miss Mabel Gilman showed much taste in her selections from the Casino Girl, and Miss Emily Dommitt was quite as successful with more classical melodies from Faust and La Traviata. Mr. Richard Green sang "The Toreador" with great gusto, and Mr. Corbett Smith appealed to the Borough folk at once in his costume song "The Little Nipper," whilst Mr. Capper struck well home with his whistling solo. Other songs were given by Mr. G. P. Tate and Mr. Joseph Wilson, whilst local talent was well represented by Messrs. Parrott, Bickerton, A. W. Soper and Northcott, Soper playing the violin obligato to Gounod's Serenade in fine form. It is not often that two such reciters as Mr. Charles Fry and Mr. Mark Ambiant can be heard on the same evening, and both were at their best, Mr. Ambiant sending his audience into convulsions with his illustration of the small boy reciting.

We cannot conclude a brief notice of this nature without a passing reference to the delightful hospitality of the Sister and the enthusiasm shown by the clerks in ensuring the success of the concert.

On December 27th, in the evening an excellent amateur dramatic company performed a comedietta entitled "Our Toys." The play was of the comic opera variety, and was well chosen. It would, perhaps, be invidious to draw comparisons between the acting of the various performers, but one feels compelled to mention the pas-de-seul by Red Riding Hood, which was particularly well executed. All the actors worked hard, and earned a well-deserved and hearty round of applause from the audience.

On the evenings of the 27th and 28th a gramaphone was brought up and worked in the ward by Mr. L. U. Ransford, to the great delight of the patients, especially the children.

CORNELIUS CONCERT.

On the 26th day of the last month of last century, I boldly walked in Cornelius ward, proclaimed my mission, and thus obtained a seat far beyond anything that I, in my private capacity, could possibly hope for. The ward was decorated on a simple and carefully worked out plan, and the beauty of the picture was not a little enhanced by the many pretty electric lamps so kindly lent by the well-known firm of Edison & Swan. It was pleasant to note the excellent position which had been reserved for the visiting patients, proclaiming to all that the concert was first of all for the patients, and that outside visitors were merely incidental.

The concert from start to finish was a tremendous success. Miss Mabel Gillman sung as we now at Guy's expect her to sing, and repeatedly delighted her audience. Miss F. Shee with "There is a Land," and "She wandered down the Mountain side" was charming. Miss Josephs kindly sang "The Holy City." Mr. Richard Green was in splendid form both in the "Song of the Toreador," and "The Yeoman's Wedding song." Mr. McD. Parrott was, as usual, to the front, his "Mediæval Knight" and "Longshoreman Billy" being among the best items on the programme. We also had the pleasure of a violin solo by the genial H.-S. and Host. Perhaps, if one was appreciated more than another, it was Mr. Corbett Smith, who, as the night progressed, became more and more in touch with his audience, and his last effort, "Mary had a little Lamb," which he gave as an encore to "Our Bazaar," brought down the house, or rather the ward, and one's memory slipped away from beds and fairy lamps, to straight-back forms and hard cushions, and one was only kept from slumber by the thought of the near approach of the collection. Mr. Ambient's recitation was indeed humorous.

Altogether the evening was quite up to the best traditions of the Hospital, and just such a one as one expects to spend in such a ward, with such a Sister as hostess.

NAAMAN CONCERT.

The concert in this ward took place on Thursday, December 27th, at 4 p.m. The soft light of the innumerable Chinese lanterns rendered the ward a perfect haven of warmth and comfort, and added to this the excellency of the programme rendered the entertainment one of the cheeriest of the week. The items on the programme were so uniformly good that it would be difficult to pick out any for especial praise. Part I. was opened by Miss F. Owen at the piano, who played Blumenthal's "Barcarolle." Dr. Simpson made the welkin ring with "Heroes of England," Miss L. Wigan warbled sweetly to us of "Violets," and was followed by Miss Owen, who showed her mastery over the violin in a pretty "Pizzicato." Mr. E. L. Huson's fine voice was heard to effect in the "Friar's Song" from Ivanhoe, while Miss Inez Purcell told us in song about "Love the Pedlar." Then a trilling on the flute by Mr. Ward, who was encored, was succeeded by Mr. Carr, who, with excellent method sang of "English as she is spoke," and was likewise encored. Part I. was concluded by Miss Agnes Davies, who sang the "The Children's Home." The "Tea and Talk" interval over, Mr. Ranalow took the floor and was encored for his rendering of "Long ago in Alcala," an encore was also demanded from Mr. Murray (who must possess a cast-iron larynx) for his Musical Sketch. Mr. Ward again emitted a harmonious shower of notes from his flute. Mr. Huson's "Mandalay" was followed by Miss Wigan, whose song bore the paradoxical title

"Absent yet Present." A violin "Serenade" by Miss Owen, preceded Miss Purcell's "Coming through the Rye," for which she had to sing again. Mr. Carr's semi-pathetic song "Jimmy, You and I" was highly appreciated, and encored. Mr. Ranalow unearthed "The Old Grey Fox," and when Miss Agnes Davies had charmed us again, the performance was brought to a close by a duet "Echoes," sung by Misses E. M. and L. Wigan.

Sister Naaman's excellent motto "Patients first, everyone else next" is one which might well be taken to heart by a good many guests and some hosts. A word of thanks to Mr. C. T. Hilton, who was "Engineer."

LUKE CONCERT.

Luke held what proved to be one of the most successful concerts of the year on Thursday, the 27th. Everything went with a swing from start to finish. There was never a dull moment, and if the comic element was somewhat prominent beyond its wont, the patients certainly enjoyed every minute of the entertainment.

To essay the task of musical critic were as impossible as it is unnecessary. Each number seemed to please us more than its predecessor. We again had the pleasure of hearing Mrs. Cohen on the pianoforte, Miss Shee and Miss Josephs. The former was heard to more advantage in the second part; the latter's song with the violin obligato was delightful. Violin and mandoline, too, were again in skilled hands; the popular "Francesca" seemed to give fresh charm as played by Mr. Bickerton. Miss Babington was exceedingly good in "Honey, my Honey," and gave us San Toy's "Rhoda," as an encore, while Mr. Preston transported us to Burmah with his excellent rendering of "Mandalay."

The making of the concert's success lay rather in the hands of the humorists. Here it would take up both time and space beyond our limits to dwell on Mr. Dandridge's "Our Bazaar," and "Our Honeymoon"; on Mr. Horace Startup's "Oh! Mr. Robinson," and "Our's is a happy home"; on Mr. Arthur Startup or Mr. Carr, who both made us laugh. Nor must we fail to mention Mr. Murray's clever sketch in this place.

If all the performers have not been mentioned in sufficient detail, let it be put down to the host of good things we heard, and the kaleidoscopic rapidity with which they followed each other. The whole impression we carried away was that of an entertainment that seemed to "run itself." All praise, then, to Mr. Cohen's organisation; all thanks to each and all performers.

LAZARUS CONCERT.

On Thursday last a most successful concert took place in Lazarus, before a crowded and enthusiastic audience. Among the performers were the following ladies and gentlemen who most kindly gave their services:—Mrs. Dandridge, Mrs. Parke, Mrs. Musson and Miss Burnett; Messrs. Dandridge, Preston, Northcott, Holmes, Turner, etc. At the end of the concert, Mr. Lucas made one of his short and witty speeches, thanking the performers and those who had arranged the concert.

DORCAS CONCERT.

Not the least among the difficulties that besets the path of the organizer of ward concerts, is the varied taste of his mixed audience. The barbaric beauty of Moszkowsky is as unintelligible to the Borough denizens, as is the broad humour of a typical comic song to them of artistic temperament. And for this, if for no other reason, are those concerned in the Dorcas concert to be most heartily congratulated, for their programme blended the gay with the passionate, and the popular with the classical, in a manner which drove away the very shadow of weariness from every listener—patient and visitor alike.

Opening in unorthodox fashion with a violin solo played with perfect finish by Mr. Rohan Clensy, the performance maintained its initial impetus by the clever sketches of Mr. Hawtrey and Mr. Douglas, the remarks of each of whom were punctuated by roars of laughter. In two 'cello solos, Miss Vernet delighted all ears by her delicate touch, while Mr. Ward left everyone undecided whether to prefer the brilliancy of his piccolo or the softer tones of the flute from which he enticed such a volume of mellow sound. Both Miss M. Jackson and Mr. E. N. Davis received well-merited applause, and Miss Daniell's voice seemed, if possible, even sweeter than when she last sang to us at Guy's.

LYDIA CONCERT.

The concert in this ward, held on Friday, December 28th, proved a great success, and attracted a large audience. It owed, like so many others, the greater part of its attractions to outside performers, and it is difficult to over-value the amount of work and "go" they imparted to the proceedings.

Mrs. Smithers opened with a piano solo, which proved extremely popular. Mr. Parrott followed with a more familiar song, which lost nothing from the personal knowledge of the performer displayed by the audience. Miss Notley was encored for a song, and Miss Mabelle Gilman proved as potent a "draw" in Lydia as at the Shaftesbury. Miss Dorothy Hope charmed everyone, and was loudly recalled. Miss Edith Newton and Mr. Bartlett both found favour, and a string quartet brought the first part to a successful conclusion.

The second part was a medley of songs by Miss Gilman, Miss Hope, Miss Notley and Miss Newton, with encores, and comic songs by Mr. J. J. Dallas and Mr. Fred Roberts. It proved the better part of the two, and the performers' names speak for themselves.

Individually, we must express our heartiest thanks to the performers for coming down to give our patients so much pleasure, at, we fear, some trouble to themselves, and we can only hope that the evident delight they were greeted with will repay them their labour. Miss Gilman and Miss Hope were the most popular artistes, always excepting the strong bias inevitably evinced for the

"comic man." Miss Newton sang well, but did not sing so well nor display her well-trained voice to so much advantage as later on in Astley Cooper. It is to Mrs. Smithers that we feel most indebted, both for her splendid playing and her kindness in accompanying those songs which were too difficult for the ordinary man to read at sight.

ASTLEY COOPER CONCERT.

Astley Cooper was a very Aladin's cave, hung with jewels, crowded and brilliant. The concert was opened at seven o'clock, on Friday, December 28th, by our old friends Messrs. Northcott and Holmes at the piano. They were followed by Miss Mabelle Gilman, who sang "On Broadway" as only she could sing it. Mr. Spearpoint and Mr. Stevenson provoked much mirth with their humorous songs, and were heartily encored. Miss Agnes Davies, Mrs. Timothy Davies and Miss Saunders sang delightfully. Mr. Sidney Cecil sang "Breakers Ahead," and had to come and sing again before his audience were satisfied. Miss Pettit with her 'cello made melody melodious. And last, but by no means least, our only Mr. Mullins sang his ever popular "Lucky Jim," with many appropriate interpolations, and looked as if he enjoyed it immensely. Mr. Thos. Holmes deserves a special word of praise for the excellent way he carried out the difficult and unthankful task of accompanist.

MARY CONCERT.

A most successful concert was given in this ward on Saturday, December 29th. The decorations were very pretty, and the audience was even larger than in former years. The programme was to have opened with a trio by Mr. and the Misses Walker, but unfortunately Miss Walker was unable to be present, so Mr. Walker gave an excellent solo on the 'cello. This was followed by "Beauty's Eyes," beautifully rendered with violin obligato by the Misses Lethbridge. A solo on the mandolin by Mr. Burnett was much appreciated. Miss F. Daniell sang "Madrigal," and later in the afternoon "Love me, Sweet, with all thy heart." The first part of the programme ended with a very pretty song by Miss Tchaykovsky, which was unfortunately spoilt by a slight conflagration over the fire-place.

In the second part of the programme the ever popular and obliging Mr. H. McD. Parrott sang "Star of my soul" with his usual success. Miss Daniell gave a beautiful rendering of "The Shepherd's cradle song," a song which it is very hard to beat. Last, but by no means least, Miss Shee sang "There's a Land," and in answer to an undenying encore sang "The Castillian Maid."

The interval was enjoyed by all, and the arrangements were perfect in every respect. Sister is to be congratulated on the fact that, although she provided exactly double what was provided last year, yet everything was gone before the end of the evening.

MARTHA.

The entertainment given here on Saturday afternoon, December 29th, assumed a different form from the rest. The ward was beautifully decorated, and was specially favoured by a visit from "Old Father Christmas," much to the delight of the children, and in anticipation of his advent a splendidly decorated and illuminated Christmas tree was provided, from which everyone connected with the ward, from the highest to the lowest, received a small present (including a box of tools for Mr. Lane, which he much appreciated). A "Punch and Judy" show and some impromptu music helped to make the entertainment a thorough success.

PATIENCE AND SAMARITAN CONCERT.

Esculapius must have rejoiced on Saturday evening to see so many of his budding disciples and their friends gathered together in Patience ward (which was most daintily decorated) to hear the concert that Sister Patience (Miss Haughton) had arranged. The twenty-four items on the programme consisted of pianoforte duets, violin, 'cello and mandoline solos, songs, duets and recitations, and were received with rapturous applause.

Two vocal duets, "Over the silent Lagoon," sung by the Misses Nellie and Laura Bush, and "It was a lover and his lass," sung by the Misses Daniell, were beautifully rendered. The other vocalists were Miss McArthur, Miss Daniell, Miss Bodle, Miss E. Rock, Mr. D. Soper, Mr. Parrott and Mr. Claxton, all excellent, especially so Miss F. Daniell in Dr. Arne's song "The lass with the delicate air." Mr. Beck's humorous recitations fairly captivated the audience, both being vociferously encored. Mr. Stanley Fry's "make-up" as an old man, and his singing of Chevalier's song, "'E can't take a roise out of oi," were perfect, and in response to an encore sang "Mary had a little lamb." The accompaniments were most artistically played by Mr. T. E. Holmes.

During the interval the audience were regaled with tea, coffee and other refreshments, and also had an opportunity of seeing some "Souvenirs of the Boer War," kindly lent by Mr. Fripp.

"Auld Lang Syne" and "God save the Queen" were enthusiastically sung by the audience, and so ended one of the most successful concerts given at Guy's.

JOB CONCERT.

This Christmas series of concerts terminated most successfully in the programme provided for Job ward on Monday, December 31st. It commenced at 6 p.m. and opened with a trio with violin, mandoline and piano, by Messrs. Cohen, Holmes and Bickerton, who had already done such excellent service on previous occasions.

The Misses Murray and Miss Moyse, from the Savoy, delighted the audience with their songs, duets and trios, and everyone went into ecstasy over Miss Blanche Murray's rendering of "Soldiers of the Park." Messrs.

Spierpoint, Reubens and Playfair supplied the comic element with great success.

Miss Webb and Miss Stanton made the violin speak with much feeling and Miss Pettitt enraptured the audience with her perfect intonation and depth of expression in her 'cello solos.

Miss Dorothy Yorke was encored for her tasteful singing, and Mr. Hurtz's quaint rendering of Louis Carroll's "The Walrus and the Carpenter," was much appreciated. The programme was completed, with much mirth and enthusiasm, by the master of the ceremony, Mr. Mullins, giving his now famous "Lucky Jim," with two additional verses written for the occasion.

Sport.

Association Football.

GUY'S 1ST XI. v. OLD FORESTERS.

Played at Honor Oak Park on December 15th. Guy's kicked-off, and after some fifteen minutes' play scored their only goal, Chignell making a very good shot which just went in by the post. The visitors then pressed, and one of our backs miskicking, they were able to put in a shot which, our goal-keeper failing to save, went in the net. From this time till the end of the first half, the game was of a very scrambling character. The second half was, if anything, worse than the first, and little good play was seen. Guy's certainly had hard luck in not obtaining the lead, as several shots struck the goal-posts and rebounded into play. The game ended in a draw, each side having scored once. Team :—

GUY'S.—E. A. Collins (goal); W. M. Robson, A. D. Crofts (backs); H. Bacon, N. P. Shepherd, J. Cameron (half-backs); T. Edey, H. Barber, T. A. Chignell, E. L. Norton, J. Wilson (forwards).

REMARKS.—Granted that the ground was wet and the ball not all that could be desired, yet the display given by our team was poor in the extreme. The XI., individually and collectively, played badly, and it is to be sincerely hoped that this was due to "staleness." The forwards lacked combination, the halves could not tackle, and the backs miskicked. Unless some speedy improvement is seen, the chances of our seeing the Cup are remote.

Appointments.

HOUSE APPOINTMENTS.

The following appointments have been made by the House Committee upon the recommendation of the Medical Committee :—

House-Physicians.—Messrs. A. H. Davies (Dr. Taylor); E. W. Goble (Dr. Pitt).

Assistant House-Physicians.—Messrs. L. E. Stamm, T. E. Holmes.

House-Surgeons.—Messrs. T. P. Thomas (Mr. Jacobson); W. B. Secretan (Mr. Lucas).

Assistant House-Surgeons.—Messrs. P. W. L. Camps, H. McD. Parrott (Front Surgery); A. Densham (Mr. Fripp); T. J. Wright (Mr. Symonds); F. W. Sime (Mr. Lane); J. S. Steele Perkins (Mr. Dunn).

CIVIL.

DIXON, J., M.D. St. And., L.R.C.P. Lond., M.R.C.S., has been appointed, *pro tem.*, Medical Officer for Rotherhithe.

MANLEY, J. H. H., M.B., B.C., M.R.C.S., D.P.H., has been re-appointed Medical Officer by the West Bromwich Town Council.

NAVAL AND MILITARY.

Surgeon SYDNEY CRONEEN, R.N., has been appointed to the *Raven*.

Major S. O. STUART, F.R.C.S., R.A.M.C., is posted to Woolwich for duty.

Captain S. ESMOND PRALL, I.M.S., is promoted to be Major.

From the Gazette's Special Pathologist.

ALL specimens—particularly those of solid tissues—should be accompanied, if possible, by a short clinical and post-mortem history, and a postal order for 2s. 6d. An extra charge of 6d. per slide is made when prepared sections are to be forwarded.

Directions to be followed in sending *Diphtheritic Membrane* :—Remove as much of the membranous exudation as possible with a pair of forceps, which have been sterilized by boiling water. Place the exudation in a small, perfectly clean empty bottle, with a well-fitting glass stopper, and forward without delay. No preservative fluid should be used. The specimen must be accompanied by a Postal Order for 5s. A telegram will be despatched immediately the examination of the specimen is completed.

Diphtheria specimens are to be labelled *Immediate*.

Postal Orders to be made payable to Mr. C. H. WELLS.

NOTICES.

T. E. D. H., REIGATE.—No tubercle bacilli were found in the sputum.

T. W. L., WOOLWICH.—Reaction acid, sp. gr. 1035; albumen, a *minute trace*; blood *absent*; sugar *absent*. This specimen separated urates rather freely. These were cleared up by warmth before centrifugalising. Microscopical examination of the centrifugalised deposit.—This is composed almost entirely of crystals of calcic oxalate. No pathological elements were found.

F. T. M., CHARLBURY.—The growth on blood-serum after incubation is a nearly pure culture of the Klebs-Löffler bacillus. PATHOLOGIST.

Artificial Crowns.

A paper read before the Dental Society on Friday, October 10th, 1900, by Mr. G. H. MORRIS.

MR. PRESIDENT AND GENTLEMEN,—The subject of Artificial Crowns is one with which we have constantly to deal. It is a subject also to which we must give a good deal of attention, for, so varied are the methods advocated—methods dealing both with the operative and mechanical sides of the question—that we must be constantly on the alert, as it were, to choose the best. That we have not arrived at a perfect crown is evident from the many new crowns and methods that are constantly being put forward in the pages of our dental journals. One can scarcely pick up a journal without finding several such which claim certain advantages—advantages which too often are only apparent to the inventor.

I do not propose this afternoon to give a general outline of these crowning operations, but to deal with the construction of one crown in particular, with which I am intimately acquainted, and can speak about with confidence from a practical standpoint.

We, as dental students, I trust, recognise the fact that dentistry is not only a science but an art—art, indeed, must inevitably play a most important part in the career of the successful dental surgeon. But in whatever direction we turn our attention to give play to art and inventive ingenuity, I am convinced that in no quarter is there more scope for us than in the construction of artificial crowns.

One cannot help noticing with regret the number of crowns that too often come under one's observation, where all attempt at a reproduction of the natural tooth has been disregarded, and, as a result, one finds a crown much more like the ferrule for a walking-stick than a substitute for a human tooth.

In constructing a crown, though its longevity and usefulness must be the paramount consideration, yet it is neither more difficult nor does it lengthen the operation to combine a natural appearance with both these qualities; indeed, the three should be inseparable.

In describing the different stages in construction I shall try, therefore, to keep this matter before us, and consider in detail the points one should notice, and to a certain extent be guided by, in order to copy nature.

I wish to draw attention here to the fact that I am going to deal exclusively with the construction, and shall only touch upon the surgical side of the question when necessary for the elucidation of the point in hand.

I shall now describe the construction of a porcelain-faced banded bicuspid crown. There are many ways of accomplishing this operation, and I lay no claim to originality in the method I shall describe. Avoiding the surgical side, then, we shall suppose that we have a second upper bicuspid root already "coned," and its circumferential measurement represented by a loop of binding wire in the dentimetre. In the first place this wire is struck into a block of lead, in order to preserve the shape of the root for future guidance, after which the loop is divided, and each portion being straightened, it is used to gauge the exact length of the band.

The carat, kind and thickness of the gold which is used for the band, vary with the opinion of the operator; personally I have always used Australian sovereigns, which are 22 carat, rolled down to No. 28 American gauge. Since it is of a lighter colour, the Australian is to be preferred to the English, because the seams will be less easily detected. After the sovereign has been rolled out to the required gauge, a straight edge is cut on it. The gold is now laid flat on the table or bench, and on it an arc is described, near the straight edge, with a widely opened pair of "dividers." The "dividers" are opened less than half-an-inch further, and another arc described from the same centre. The result will be a band of approximate width marked out between two parallel curved lines. Upon the first line marked the wire gauge is placed, and the length scored off. It is as well to score it off a little on the short side, as the gold will stretch slightly with manipulation. Now with straight shears for the ends—which must be cut at right angles to the line—and curved shears for the sides, the band is cut out of the sovereign. After filing down rough points, the band is bent round to roughly resemble the impression in the lead. It is as well to have the join on the palatal aspect, both to obviate difficulties in future soldering, and also that it may not show.

Now that the band is bent into approximate shape, it shows a collar with one margin greater than the other—when the shorter has been adapted to the root, the greater will allow for contour. When the ends of the band are bent round to touch, nice adaptation of the edges to be soldered may be facilitated by a few cuts with a two faced dividing file, after which they are held in contact with binding wire.

At this stage the question arises as to what solder to use. Personally, I have obtained excellent results from using S. S. White's 20 and 18 carat solders, their colour resembling closely the colour of Australian gold, while their flowing property and strength is all that could be desired.

It is exceptional that anything more than these two grades of solder are required. The principle of commencing with a high carat solder, and lowering it for each succeeding soldering operation, is one I do not advocate. The high carat solder, being freer from alloy than the low, consequently oxidizes much less readily, and thus is really easier to work. I am sure that many of the difficulties that occur during soldering, are due to the solder oxidizing and often forming a ball just where it is not wanted.

To return to the band that is just ready for soldering, a flux, of course, must be used, and borax is the best. It is most conveniently used in the form of a saturated solution of fused borax, which is kept in a bottle always ready for use. With a splint of wood the join is wetted with the borax, while a piece of twenty-carat solder, half the size of a pin's head, is placed upon one end of

it. With a pair of tweezers, catching hold of the twisted wire, the band is now held obliquely over a Bunsen flame till the solder melts. It is well to remember that solder always flows in the direction of most heat: thus, the end of the band furthest from the solder is heated most, when it will be found to flow directly down the join. I might here mention that in making crowns, thorough cleanliness from the commencement to the end is most essential.

The next step is to fit the band to the root. This being a surgical matter, I shall pass over it without description; indeed, the operation in itself would supply sufficient material for a separate paper. Assuming, then, that the band is fitted to the root, in order that no gold may show, it must be estimated to what extent the gum will grow up around the band after the injuries sustained in coning have subsided. This line may be indicated upon the band by a scratch with a probe. Further, and for the same reason, all the surface seen from the front is marked off. An impression is then taken of the side of the jaw having the band in position. For this, Teague's compound (a plaster-like material) is to be preferred on account of its stability. The occluding half of the lower may be taken with Stent's composition. After the colour of the teeth is taken and the "bite" noted, the patient may be dismissed.

The impressions are cast and subsequently drawn, and after waxing them together in their correct relationship, they are set up in a crown-articulator. The lower may or may not require hardening in stearine, according as the occluding tooth is sharply cusped or otherwise. It will be found that the band can easily be removed from the cast, leaving behind it a clean, sharp impression into which it can again be placed when necessary.

Having filled the band with composition to prevent it from collapsing during sawing, one proceeds with a fine fret-saw to cut out that portion of the band which was marked off in the mouth, although care must be taken that the vertical part of the saw cut shall be quite straight, forming an obtuse angle with the line at the gum margin. If it were not straight, but curved as one is apt to draw it in the mouth, it is obvious that fitting the tooth or porcelain front would be a much more difficult operation. After using the fret-saw, it will be found necessary to use a superfine file to get the edges of the so-called "window" quite straight; the vertical saw cuts must also be parallel when looked at from the side.

The composition is now removed, and the band contoured. Although there are pliers especially designed for contouring, I have never been able to obtain the same results with them as by using an instrument with a rounded end, fixed obliquely and firmly in the vice. The band is held and guided over the rounded end with the finger and thumb while it is tapped with a riveting hammer where it requires stretching. In this way a perfect contour can be obtained with a minimum risk of altering the shape of the band at the neck. The band must constantly be tried on the model to see that the desired result is being obtained, viz., a correct representation of the tooth to be replaced, while special attention must be paid to having the crown in contact with the teeth on either side. This is most essential, as otherwise the patient is subject to the constant annoyance of having food wedging in, which, also, by pressure on the papilla of gum between the teeth causes it to recede, thus predisposing the adjacent teeth to caries.

Being satisfied with the contour, the band is placed on the mould and the porcelain tooth selected. A pellet of pink wax, placed in the collar, will be found a help in fitting the tooth.

The different firms, both English and American, manufacture teeth especially for crown and bridge work. There is, however, a marked difference in the way the teeth of different firms stand fire. For instance, the teeth manufactured by S. G. White become much lighter —almost white in some cases—at a high temperature, and also I have found them much more liable to crack; while those of Ash & Sons stand fire remarkably well. One should, therefore, choose an Ash's tooth where possible, and necessarily a canine for the case in hand. Next, one must decide whether to use a thick or thin tooth, and this depends upon the amount of band cut away,—but not entirely so: the contour of the crown must necessarily be kept in mind.

Having chosen a tooth of correct colour, size, and shape, one proceeds to fit it. Of this operation there is not much to say; it is simply one of grinding, trying, and grinding again. It is to be remembered, however, that one can always, if necessary, cut a little off the vertical sides of the "window" to save grinding—one must do so, of course, when, for instance, the incisive tip is too prominent.

The manner in which the tooth must fit is upon, not inside, the window, except at the base or gum margin, where it should be slightly inside to allow for the thickness of the backing, which would otherwise cause it to protrude. When it is thus fitted the biting edge is bevelled upwards and outwards from the top of the band, so that when the bite is tried there is somewhat less than one-eighth of an inch clear.

The tooth is now backed with pure gold, No. 34 American gauge, the backing being large enough to allow of its being burnished over the sides, base and tip, more particularly the last, although here it must not be burnished down, but let stand out like the eaves of a house, otherwise the contraction of the solder in the cap when fitted in the last soldering operation, drags on the porcelain, usually resulting in a fracture all along the cutting edge.

The pins in backing should not be riveted, but with a sharp knife or chisel a strip is peeled down from the porcelain half of each pin, and burnished down on to the backing. The remaining portion of the pins should be cut off. The disadvantage of riveting is, that one never knows when by doing so that a strain has not been placed upon the pins, and consequently upon the porcelain—a matter of vital importance where heat has to be applied.

Before the backed tooth is again fitted in position, the window edge is bevelled at the expense of the inner surface of the band, so that when the tooth is placed in the aperture, there will be seen, on the inside, a V-shaped crevice between the backed tooth and band. The object of this I shall explain later.

The wax I have used for all waxing-up operations, is a production known as "Parr's flux wax." Although not a good flux for soldering, it does possess the distinct advantage of not hindering the flow as other waxes do. Before waxing the tooth in position, the band is thoroughly cleansed by pickling it in a mixture of sulphuric acid and water of equal parts. When the tooth is waxed in position from the inside, a beading of this wax is run all round the join outside, which is done by taking up a little piece of wax on a heated spatula and drawing it along the join. Thus a rope of wax covers the join, so that, later, when heat is applied, the wax melts and becomes absorbed in the investment, leaving a canal beneath or behind the join, which to a certain extent draws the solder—thus one seldom has any difficulty from it not flowing.

The next step is to invest the whole in a mixture of plaster of Paris and sand in the proportions of four parts of plaster and five parts of sand. On a piece of glass, a wet lump of this mixture—about the size of half a walnut—is put, into which the band is placed on its side, with the tooth beneath; then just sufficient investment is added to cover the exposed part of the band and edges.

After hardening, it must be trimmed up—and that very carefully—till the investment left surrounding the tooth and band is not more than one-eighth of an inch thick, and quite smooth. The plaster or investment is cut off also at the ends of the band, flush with the edges, but in no case should they project uncovered. A portion of the flat surface, caused by putting the investment upon glass, is left in order to prevent rolling during soldering.

After these preparations, the whole should look like a flattened barrel with both ends open. To help the investment to hold together, it is wise to pass a piece of binding-wire round the middle of the barrel and lightly twist the ends.

The wax is now poured off with boiling water, for, although this wax is a flux, it is as well to pour off as much as possible, as otherwise it runs everywhere and fluxes about half the band. The mixture of borax before described is now—with a thin point of wood—run in all round the join from the inside.

The virtue of the V-shaped crevice in this situation now appears—*First*, as both flux and solder will be induced to run along the groove rather than spread. *Secondly*, and most especially, it will prevent the solder from filling up the sharp angle between the collar and backing; were it otherwise, at the cervical margin, the crown would not, in all probability, go on the root. After the borax, two small pieces of twenty-carat solder, each a pins head in size, are placed in the crevice abreast of the pins, while a slightly larger piece is placed between them, and the whole put on a net above a Bunsen flame. The flame, which is turned low at first, is raised by degrees, so that the whole investment may be thoroughly heated in from ten to twelve minutes. While it is heating all necessary soldering apparatus should be got ready. For soldering crowns, I have always used a mouth blow-pipe—there are several made by Fletcher which work very satisfactorily. For nicety of manipulation in every way, the mouth is much to be preferred to the bellows.

When heated sufficiently it is a good plan to leave the investment on the wire net over the Bunsen flame, as, by so doing, the blowing is very much lessened. If the ordinary rules of soldering be observed there should be no difficulty at this stage. The investment should be heated evenly with a fairly large flame till nearly the melting point of the solder, when the flame, very little reduced, is passed through the tunnel with the probable result that the solder will run nicely all round the join, while the piece between the pins will flow around them.

It may be necessary to place more solder by the pins in order to strengthen the backing and hold the tooth tightly. I cannot, however, too strongly emphasise the fact that when it is necessary to use more solder, the pieces must be quite small, indeed half a pin's head might in some cases be too large.

When the band has cooled down after soldering it is placed on the model and preparations made for getting the bite, which is obtained by mixing some plaster, filling up the band and closing the articulator. But it is obvious that if a cap were carved up from the impression of the occluding tooth thus obtained and filled, the bite would be raised—raised just the thickness of the cap; so to obviate this difficulty tin foil, one or two layers, according to the thickness of the cap, is burnished into the crown of the occluding tooth or teeth, covering that portion only which will occlude with the artificial crown.

If now, after slightly oiling the tin, the bite be closed upon the wet plaster, the above difficulty will be overcome. When the plaster is thoroughly set, the bite is opened and a bicuspid crown fashioned from the impression. The edge of the gold band is first uncovered all round, so that the cap meets the band edge to edge, instead of overlapping it, and forms a neat seam.

It is always a good plan, also, to exaggerate the depth of the fissures that are carved, as the gold cap struck-up never presents quite the same detail as the plaster cap.

The next step is to obtain a die and counter-die of the carved crown. If 20-carat gold of No. 28 American gauge be used, a zinc die is indispensable, but if 22-carat gold be used, an efficient die can be obtained with Mellot's mouldine and fusible-alloy outfit.

To take the impression, the band, with the plaster cap in place, is removed from the model, a little French chalk brushed over the plaster, and a pellet of mouldine pushed into the crown with the finger. A much better impression is obtained by so doing than by simply forcing the crown into the mouldine in the first place.

The cup (in the outfit) is filled with the mouldine also, and the top smoothed and slightly hollowed out with the thumb. The crown and piece of mouldine are now forced into the prepared surface far enough to give a good clear impression of the crown and its neck, after which it is withdrawn. The rubber ring (also in the outfit) is now put on, and the alloy melted and poured, the pouring being done just as the metal becomes thick.

The counter-die is obtained by driving the die into a block of soft lead. If the lead be reasonably soft, the die will not itself be altered during the process of swaging the cap. A second die, however, may be readily obtained.

To strike-up the cap, one commences by choosing a suitable piece of sovereign the same thickness as the band, and placing it upon the lead, the die is hammered into it just sufficiently far to define the points of the cusps. The gold is then annealed and in a fresh place again stamped with the die, this time a little deeper.

After the next annealing the die is struck into the lead first, and into this impression the gold is afterwards struck. If the cap does not now show sufficient detail, this process must be repeated.

When the cap is stamped up, the surplus is roughly cut away from its circumference, the tin pulled off the occluding teeth, the cap tried on the band, and the bite observed. If too high, the cap must be adjusted to the bite—preferably to a little on the short side—care being taken to secure an edge-to-edge contact between cap and band. That part of the cap which meets the porcelain face is slightly bevelled away at the expense of the under surface until just flush with the incisive edge of the tooth.

The next step is to strengthen the cap with solder. This is quickly done by investing it in a small button of mouldine, the glycerine from which rapidly burns off, leaving a fairly strong investment. Care must be taken to confine the solder to certain limits; for instance, if the solder fill up the labial cusp too full, in all probability the cap will not again be adjusted without considerable trouble. It is as well, therefore, to brush a thin layer of whitening over the outer half of the labial cusp, in order to check the solder. The remaining portion is fluxed with borax and several pieces of 20-carat solder placed in the cap; this is then fused, and more added, if necessary, till the cap is fairly full without covering any edges.

The band is now freed from plaster and together with the cap cleansed in the pickling solution. The band is replaced on the models, the cap placed upon it, and the bite finally tested. Being correct, a thin column or rope of flux wax, as before, is run round the join outside, thus holding the two parts in contact.

The crown is now invested by pushing the masticating surface into a piece of plastic plaster and sand, which is carefully built up round the sides and edges.

As before, when thoroughly hard, the investment is neatly trimmed up to one-eighth of an inch in thickness when it will appear like a barrel upon its end while the other end is open.

After pouring off the wax, and allowing the crown to dry, the borax is carefully applied inside around the join. Following this small pieces of solder are applied—this time S. S. White's eighteen-carat is used. Very small pieces of it must first be carefully placed in the interval between the cap and tooth, for it will be remembered that half the labial cusp was not filled up. To get the cap soldered to the backing of the tooth along the incisive edge is the most difficult piece of soldering in the whole crown, so it is as well to get the solder flowing freely at this point before attempting to solder the easier portion. The soldering is done on a net over a Bunsen flame in much the same manner as the first operation, only, after thoroughly heating up, the flame is especially concentrated towards that part of the seam where the incisive edge of the tooth joins the cap, so as to ensure a good flow of solder around that part. After this part is soldered, one or two pieces are placed in the join around the remaining portion, a more general heat applied, and the whole soon completed.

There is but one more step, and that is the cleaning up. When the investment has cooled down after removing the flame, the crown is broken out and boiled in the pickle, after which the overplus backing is cut off either with a fine file, or with discs upon the dental engine, which is, perhaps, the better way. Next, it is brushed upon the lathe with a fine brush, using glycerine and pumice; the glycerine washes off easily and leaves no taste. Finally, it is polished with a fine whitening brush.

There appear to be many details to remember, and many difficulties to overcome in the construction of this crown. But, if we think the subject over, we will find that it is so with all methods. Given a fair trial I am sure that the method I have described will compare very favourably with any other practised; while it has the distinct advantage of being able to fit the crown with a pin when necessary—an operation which time will not permit me to go into. Indeed, I know no other method of constructing a banded bicuspid crown, in which a pin can be so easily employed.

In conclusion, gentlemen, I thank you for hearing me through what I cannot help but feel is a very dry subject.

Birth.

KEPPEL–COMPTON.—On December 11th, at Denzil Place, Southampton, the wife of J. H. Keppel-Compton, M.R.C S., L.R.C.P. Lond., of twin sons (prematurely).

Death.

BURTON–BROWN.—On December 7th, at Via Venti Settembre, Rome, Dennis Burton-Brown, son of F. H. Burton-Brown, M.B., B.Ch., aged 13 months.

ED.—L. E. S.

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Calendar of Coming Events.

January, 1901.

Sat. 19.—Messrs. Lucas and Lane's take-in; Drs., H. A. Cutler and W. G. Parker; Cl., H. S. French.
1 p.m., Clinical lecture by Dr. Fawcett.
G.H.R.F.C., I., Rosslyn Park, home.
II., Hammersmith, away.
III., Polytechnic "A," away.
IV., Streatham III., away.
G.H.A.F.C., I., East Sheen—Surrey County Cup.
II., Beckenham 2nd XI., away.
Meeting of the Debating Society.

Mon. 21.—1.15 p.m., Clinical lecture by Mr. Higgens.
Preliminary Scientific and Intermediate M.B. Lond. Exams. commence.

Wed. 23.—1.30 p.m., Clinical lecture by Mr. Golding-Bird.
G.H.R.F.C. II., St. Bart.'s, home.
G.H.A.F.C. II., City of London School, away.

Thur. 24.—Messrs. Golding-Bird and Dunn's take-in; Drs., B. Churchill and F. Richmond; Cl., N. F. Ticehurst.

Sat. 26.—1 p.m., Clinical lecture by Dr. Fawcett.
G.H.R.F.C., I., Harlequins, home.
II., Beckenham, away.
III., Dulwich College II., away.
IV., Blackheath "B," away.
G.H.A.F.C. I., Weybridge, away.
II., Centl. Tech. Coll., home.
G.H.P.P.S., Pathological Meeting.

Mon. 28.—1.15 p.m., Clinical lecture by Dr. Perry.

Wed. 30.—1.30 p.m., Clinical lecture by Mr. Golding-Bird.

Thur. 31.—Messrs. Jacobson and Fripp's take-in; Drs., C. R. Howard and J. C. Bradbury; Cl., P. T. Manser.

February.

Sat. 2.—1 p.m., Clinical lecture by Dr. Fawcett.
G.H.R.F.C. I., Catford Bridge, home.
II., Marlboro' Nomads, away.
III., Richmond St. Mary's, away.
IV., Wasps III., away.
G.H.A.F.C. I., Ewell, away.
II., Ewell 2nd XI., home.

Guy's Hospital Gazette,

JANUARY 19, 1901.

Appendicitis.

CLINICAL LECTURE BY DR. FAWCETT.

January 12th, 1901.

GENTLEMEN,—There are at the present time in Clinical several cases which instance extremely well the clinical features of Appendicitis as seen in three of its forms, viz., (1) those in which the attack is mild and resolution occurs, (2) those in which local suppuration follows, and (3) relapsing appendicitis. I therefore propose to deal with such cases to-day. I will first of all read to you abstracts of the excellent reports of two cases, made for me by Messrs. Butler and Curtis, which demonstrate exceedingly well the symptoms and signs of the mild type of the disease.

CASE I.—M. J., æt. 15 years; female. Admitted December 31st, 1900.

History.—No previous illness. First felt ill on December 26th, was sick, and was worse on on 27th. On the 28th pain located in right iliac region. She took a pill on that day but immediately vomited it. After this the pain varied somewhat, being worse on the 29th, better on the 30th, and again worse on the 31st.

Condition on admission.—Temperature, 100°; pulse, 116; respiration, 20. Tongue furred. Fulness in right iliac fossa. Tenderness in this region; the abdomen and muscles rigid, but no definite tumour. The resonance over this area was impaired.

After-history.—The condition gradually improved, until on January 6th it is noted that the temperature, pulse, and respiration rate have fallen to normal, and the other signs of localised inflammation had disappeared.

On January 7th, however, although it is expressly stated that when the child was admitted, and for some days afterwards, no definite tumour could be felt, yet on this day I was distinctly able to feel a tumour of the size of a large walnut in the right iliac fossa, which was quite painless. Bowels open on January 6th and 7th, and from that date recovery has been uninterrupted. Thus the illness was an acute one, lasting nine days and ending in complete recovery.

CASE 2.—R. W., æt. 13 years; female. Admitted January 3rd, 1901. All that there is of interest in the history is that "she sometimes has indigestion and vomiting which usually

occurs at this time of year." No history of any previous abdominal illness.

History.—On December 28th, patient was attacked with vomiting and colicky abdominal pain.

The vomiting occurred after taking food. It recurred on the 29th, but there has been none since.

31st. Child felt sick and complained of persistent pain in the abdomen. Aperients were given, and on January 1st the bowels were open twice.

Jan. 2nd. Pulse, 120; temperature, 102·5°.

3rd. Abdominal pain more severe, and "hardness" over the inguinal region was noted.

Condition on admission.—Pulse, 120; temperature, 101°.

Tongue moist, but thickly coated with fur.

Abdomen moved fairly well, but in the right iliac region is a somewhat ill-defined tumour, with increased resistance over it; elsewhere abdomen supple.

The resonance over this region is impaired.

Tenderness on palpation specially marked at a point midway between the umbilicus and the anterior superior spine of the ilium.

The tumour was apparently a large one occupying the right iliac and a portion of the hypogastric regions.

4th. Abdomen somewhat less distended, but the other signs as before.

5th. The tumour was so ill-defined that the question was raised as to whether the case was really one of appendicitis after all, and the possibility of it being a case of enterica was discussed.

7th. The temperature remains high, varying between 100–103° as it has done throughout, but the pain has disappeared. The ill-defined tumour is, however, now better defined, and the rigidity of abdomen elsewhere less marked.

Remarks.—In this case, therefore, too, the illness has been an acute one, but the acute symptoms are now, the 14th day of the illness, subsiding. The attack, however, in all ways, has been a more severe one than in the previous case.

Before considering the clinical features of the cases, I wish to remind you of one or two important anatomical relations of this region, and also of the main pathological condition without a knowledge which it is impossible for anyone to be able to delineate for himself a mental picture of the clinical case before him, and the value of what he sees or feels.

If you are unable to imagine to yourself what the condition before you is, it is impossible for you to treat your patient to the best advantage.

If you want to learn how to draw such pictures, which will be of incalculable value to you hereafter, you must understand, or do your best to appreciate, the pathological condition which exists, and herein lies the enormous value of coming to see for yourselves the autopsies made in the hospital.

First of all, you have to remember that the cæcum is completely surrounded by the peritoneum and is *not* attached to the iliac fossa by cellular tissue.

Secondly, that the appendix varies a good deal both in length and position, and that the orifice of it is often very small, not much larger than a pin hole, and so may be very easily obliterated by disease.

The appendix, although the primary seat of the disease, is not the part which gives us the chief symptoms. That part is the peritoneum, and it is then the surrounding peritonitis which is the chief feature of these cases.

The appendix becomes affected with what we call a catarrhal inflammation, or is ulcerated, thickened, or completely blocked, and concretions form in it and it becomes distended, or, on the other hand, it becomes infected by some virulent organism which sets up a much more severe inflammation, and sloughing, and gangrene may follow.

As a result of these different processes the inflammation set up in the neighbourhood varies, and according to the mildness or severity of the process we recognise a different class of case, three of which we shall consider to-day.

For example, the peritonitis may be localized or general, chronic or acute, suppurative or non-suppurative, or there may be a mixture of two or more of these conditions.

The ætiology of the conditions is somewhat indefinite. In the two cases I have read to you you may remember that one child said she usually had an attack of vomiting and pain at this time of the year, and the other began to feel ill on December 28th. However, whether these dates are mere coincidences or not, the fact remains that the commonest exciting cause is the lodgment of some undigested matter in the cæcum, and patients often tell you that the attack occurs when they become constipated. It is comparatively common for older patients who are attacked by appendicitis to inform you that the functions of their alimentary canal are very readily upset. They have a persistently dirty tongue, pass foul flatus and thick urine, and perhaps suffer with alternating attacks of diarrhœa and constipation. Again, a big indigestible meal is frequently the forerunner of an attack,

and this, with some excessive exertion immediately following, is at times "the last straw." I have laid some stress on these points because they are important in the treatment of patients in the intervals of an attack.

Now let us turn to the consideration of the *symptoms* met with in the two cases.

Pain.—These two patients both suffered with severe abdominal pain of a colicky character, and later on in both cases the pain became localized to the right iliac region. That is the common feature, especially in first attacks. The patient appears to be suffering merely from a severe attack of intestinal colic, and it is not until the next day, or later perhaps, that the pain is specially referred to the cæcal region. The pain, however, is not relieved by pressure, and is generally intensified at intervals.

Vomiting may or may not be met with in such a type of case. It often is in children or young people, and is often not so in older patients. It occurs perhaps once only, as in Case 1, and in any case is not a prominent feature of the illness. A feeling of sickness is, however, extremely common and persistent.

Constipation was present in both cases and is generally so. An aperient, if given, is vomited (as in Case 1), or may act as in Case 2. As a rule the constipation is not so complete as in general peritonitis; some cases are associated throughout with diarrhœa, but that was not so in any of the cases I am talking of to-day.

Fever.—From the charts you may see that in the milder case the temperature varied between 100–101° in Case 1, then gradually declining, and that in Case 2, the more severe one, the temperature was between 100–103°. The fever is usually well marked, and may last even as long as a fortnight or more, as in Case 2, without there being any evidence of pus-formation. A reappearance of fever after subsidence is an unpleasant feature. It may be only due to too early movement of patient or to errors in diet giving rise to constipation, for instance, but, on the other hand, it may mean that the inflammatory process is lighting up again and perhaps leading to pus-formation.

If around an inflamed appendix the adhesions be very tough and firm, a very little pus so bound up may keep the temperature up for three weeks or a month or more, without there being any other evidence of its presence. The temperature chart, therefore, affords us a most valuable guide, not only in the diagnosis, but in the prognosis and treatment of the case, and it is possible that in Case 2, although the local conditions suggest that the inflammation is subsiding, yet there may be, deep down in the cæcal region, such a tightly bound up small collection of pus.

Condition of abdomen.—The features to be noted under this head are those *of rigidity* of abdominal muscles, *tenderness*, *tumour*, and *impaired resonance* on percussion. All of them were or are present in the two cases.

In Case 1 the muscles over the right lower part of the abdomen were rigid, and this gradually passed off in the course of six days.

In Case 2 it is still present and has been so throughout.

With this rigidity is associated *tenderness* in the right iliac region, but the tenderness has become more localized and now disappeared. However, this feature of tenderness is a somewhat variable one. It may be very well marked in cases which soon resolve, or it may be little evident even in cases where an abscess exists, and for this reason I am still suspicious of Case 2, with the temperature persisting as high as it still does.

With regard to the *tumour*, it is interesting to note that in neither patient was it at all well defined on admission, but that in both cases it has become more so as the cases have progressed. In Case 1, a well-defined tumour could not be felt until the acute condition had completely subsided, and in Case 2 it was not till the tenth day of the illness that we were sufficiently certain about it to diagnose the case as one of appendicitis. This is a very common feature of the cases. The position of the tumour is generally over the cæcum, with its base along the outer half of Poupart's ligament, but in some of the rarer cases it may extend into the loin or elsewhere. The size is extremely variable. It was very different in these two cases, and in some no tumour may be felt, especially in cases where the appendix projects down into the pelvis.

This may be detected on examination per rectum, but although in children the ordinary tumour can be so felt, in adults it cannot.

Impairment of resonance on percussion was present in both cases. It again varies much, but generally corresponds to the tumour outlines, more or less. The dulness is due to the effusion of lymph between the intestines and around the appendix, with matting of the coils and omentum, and retained fæces in the cæcum. We should therefore expect to get, as we do, not a completely dull note, but one which is variable and impaired only.

General condition.—The patients did not either of them look extremely ill, and the symptoms were far less acute than in those

with acute general peritonitis; that is to say, the thirst and collapse, etc., such marked features in the latter, are not seen in the type of cases we are here dealing with.

Course.—These cases instance very well indeed the usual course of the mild forms, viz., an acute illness gradually subsiding and clearing up altogether in about a fortnight. When I say "clearing up altogether" I ought to mention that often a tumour of a sausage-like form can be felt in the right iliac fossa for some little time after, although many clear up leaving no traces whatever, except a feeling of stiffness in that region.

We will now take a type of case in which local suppuration resulted. The report is an excellent one by Mr. Manson, and illustrates clearly the main features of the case.

CASE 3.—E. R., æt. 8½ years; male. Admitted January 3rd, 1901.

On December 27th he attended a school treat. He admits to having eaten too much. He has never been seriously ill before. Next morning he ate his breakfast and afterwards began to complain of pain across the stomach, between the umbilicus and pubes. He was sick.

28th. Felt sick and retched somewhat. The bowels were opened twice after an aperient.

30th. A lump, gradually increasing in size, noted in right iliac fossa. The next day it was larger, more tender, and resonance over it diminished. Temperature has varied between 100–101·5°.

Condition on admission.—Pulse 114, temperature 101·4°, respiration 20. He lies on his right side with legs drawn up. The tongue is furred. The tumour in the abdomen is considerably larger than in the other two cases, having its base along the whole length of Poupart's ligament and extending half an inch beyond the middle line internally, and above to within one and a half inches of the umbilicus. It is painful all over to pressure, and is dull on percussion. The remainder of the abdomen is resonant. Nothing could be felt per rectum.

January 4th. On account of the child's general condition being not so good in the evening, the pulse having risen to 120, and the pain having increased, it was decided to operate. Mr. Fripp opened an abscess containing about ʒij. of foul-smelling pus. There was a free discharge of pus during the next twenty-four hours, but since then the condition has gradually improved, and the child is making an excellent recovery, the temperature having come down to normal.

Now, in looking over this case we notice that the onset and general symptoms are practically the same as those in the previous two, but that as the case advanced they became more marked. What, you want to know, are the salient points which helped us to come to the conclusion that in this case we were dealing with a case in which a local collection of pus had developed?

At the onset there are no symptoms which help us to determine whether pus is going to develope or not. Many begin most acutely and clear up as rapidly, and vice versâ. Indeed, even cases which at first were so severe as to simulate an acute general peritonitis have been known to undergo resolution without pus-formation. It is this variability which makes it so difficult to decide upon the right course of treatment, but on the whole you will not, perhaps, find it so difficult, as it appears to be from what I have said, if you bear in mind the pathology of the disease, and certain symptoms and signs I shall now refer to.

In this particular case the boy had evidently been acutely ill and was so when he came in. You may remember the report states that his knees were drawn up, his temperature was high, that the tumour had gradually increased in size and become more tender and that after admission there was a marked deterioration in his general condition; he looked more ill and evidently was so.

Thus, the points I should lay stress upon are these:—

He had been ill eight days.

There was a marked increase in the swelling, in the area of dulness, the tenderness and the rigidity, and associated with other signs the fact that he was at this period of his illness not improving but going back.

The temperature was keeping high and the pulse-rate increasing, and he had his legs drawn up.

Other features which are of value in the diagnosis are that the tongue often becomes brown, and pain may be felt, in addition, in regions away from the seat of the mischief, viz., in the external genitals.

I remember very well indeed one patient who complained of severe pain at the end of the penis during the development of the pus, but the pain disappeared on the abscess being opened. Another helpful sign in such cases is where the temperature having dropped, it again rises. Œdema and redness of the skin are always mentioned as diagnostic signs, but

by the time these signs are present the diagnosis is usually quite certain.

Now that I have told you of the most valuable signs I must remind you that in some anomalous cases we have few of these signs to help us. There may be very little swelling and there may be no, or very little, fever. It is the knowledge of the existence of such cases that makes the physician always more or less anxious, and the only safeguard you have is that you know that you may at any time meet with such, and therefore will be on the look out for features in the case which may suggest to you that after all it is not one of the mild class. You must remember, too, that pus *may* form within forty-eight hours.

Course.—When these abscesses have been opened they speedily clear up, as a rule, and convalescence is established in three to four weeks.

CASE 4.—The last class of case I am going to mention to you to-day is that of the so-called "relapsing appendicitis;" and I will read you the notes of a case, made first by Mr. Camps and later by Mr. Manson.

J. B., æt. 28 years; male. Admitted December 22nd, 1900. He had had an attack three months before of a similar character to the present one. The latter commenced on December 19th and was associated with vomiting, which lasted all day.

20th. He continued to vomit, and the pain was severe.

21st. Vomiting still present. Up to this date the attack was associated with diarrhœa. Patient has always suffered with constipation in the intervals of the attacks, the bowels being open about once in three days.

Condition on admission.—Pulse, 90; temperature, 99.4°; respiration, 24. He is said to have had an "abdominal look," and to appear worse than his physical signs would lead one to think. The symptoms were of the same character and type as in the other cases, except that the attacks of vomiting and retching gave rise to more diffused abdominal pain and the walls of the belly were more rigid all over.

Course.—During the first two days the symptoms subsided somewhat, and by December 25th had completely so.

December 26th and 27th he had a recurrence of symptoms of less severe type, but on December 28th these had again disappeared, and patient went out on January 8th, to return, after going to a convalescent home, to have the appendix removed.

Remarks.—About the attacks themselves there is nothing particular to note, and between them the patient is practically well. The attacks may vary very much in degree, as instanced by another patient in the ward who has had several, some of which were much more severe than others. After a number, one of them may end in suppuration. It is extremely common to note that as in this case the individual is liable to be constipated, and to suffer from some form of dyspepsia or some irregularity in action of the bowels. Again, the patient complains of stiffness or discomfort on the right side of the abdomen, especially on exertion. I remember another case in which it was possible to feel quite distinctly, between the attacks, an enlarged appendix.

We now come to the *treatment* of these three types.

All cases, even the very mildest, must be sent to bed and kept *absolutely* at rest until the process has quieted down completely. By such cases I mean those we do not usually see in hospital, but which you will frequently meet with in practice hereafter, viz., where there is an attack of more or less sudden pain and tenderness with a little rise of temperature and perhaps vomiting and constipation. The attack perhaps only lasts twenty-four to forty-eight hours. You will very likely meet with opposition from your patients. They consider it is "nothing much" and will be "all right directly." So it often will, but nevertheless you have got your mental picture in front of you, of the pathology of the process which is going on in their abdomen and you must therefore insist, with full confidence in yourself, on their doing what you tell them. If they do get well in a few days you are satisfied that the right thing has been done for them, even if they do think you "are an old woman" for the time being. Whereas if you do not insist and the case becomes a severe one, as it well may do, you will be to blame.

I place so much stress upon this because I feel strongly that over and over again the improper treatment of a first mild attack lays the foundation of others, and of those others being much more severe than they might otherwise have been.

At the onset with acute pain nothing is so efficient as a morphia injection, hot flannels to the abdomen, and starvation until the vomiting has ceased. Do not continue the morphia as a routine treatment after this, because you do not want to mask symptoms which may lead you to a correct interpretation of the processes which are taking place in the case before you. The

morphia, or a small dose of opium in the case of a child, should only be given to combat the pain, and of the former gr. $\frac{1}{6}$ is generally sufficient even for an adult.

When the vomiting has subsided warm fluids in small quantities may be given by the mouth, and it is best to peptonize the milk so as to have as little solid residue after digestion as possible.

In Case 2.	Peptonised milk Oij Albumen water Oj.	Was ordered in the 24 hours.
3.	Albumen water Oj. only	
4.	Peptonised milk Oj.	

Hot weak tea or hot beef tea may also be given.

The most difficult question to decide is as to the administration of an aperient. In the acute cases one should never be given.

There are, I should say, certain men only who might be allowed to administer one. If you see the patient from the start and you feel convinced that the case is a mild one, that there is no intense pain or collapse present and all the symptoms are subacute, then an aperient may be the best treatment and cut short the attack. But in the acute cases you must not think of giving an aperient, and on the whole as without considerable experience it is difficult to determine to which cases you may give it one, I should recommend you to use an enema, by which means a satisfactory evacuation is almost always produced.

In addition, Cases 1, 2 and 4 were given a powder containing Pulv. Doveri. gr. i., Pulv. Hyd. cum Creta. gr. j., 6 tis. horis, or t.d.s., according to age.

The bowels had in each case been already evacuated. The cases were regarded as non-suppurative ones and as it is of great advantage to have the bowels regulated if possible, a combination such as the above which creates no active disturbance, will often effect the required purpose.

After the bowels have been once opened satisfactorily, then it is best to promote action every other day by means of an enema.

A spare dietary should be given until all the fever has subsided and the affected region is free from tenderness and swelling.

2. *Cases associated with local suppuration.*—Operation is rarely necessary before the fifth or sixth day, and it is advisable not to operate before this if possible. I have already indicated to you the symptoms and signs which render operation necessary, but of course there are the very acute cases which require operation earlier to give them even a chance of recovery, but these are those associated with the symptoms and signs of perforation, and are not, as a rule, difficult to diagnose.

The object of deferring operation until the fifth or sixth day at earliest is that the affected area may become shut off by adhesions from the general peritoneal sac instead of having to search for a small hidden and recent collection of pus in the open peritoneal cavity.

Again, it is seldom that in these cases there is definite evidence of pus until this date, but if it is detected before that, then the abscess must of course be opened at once.

Other details belong to the province of the surgeon, but there is one point that has often struck me, and that perhaps I may be allowed to refer to, and it is this, that after the abscess is opened the less manipulation there is the better for the patient, I mean no prolonged hunting after the appendix, as the cases are, as a rule, cured after the abscess cavity has cleared up.

(3). *Relapsing cases.*—The best time to operate upon such is in the intervals between an attack. The patient, whose report I read to you, is to be treated in this way. He had had a sharp attack, but without pus-formation. He was rather flabby and anæmic after his attack, so we sent him down to a convalescent home to come back in a month for operation, giving him at the same time carefully drawn up instructions for the regulation of his bowels and diet.

It is not, of course, necessary to operate on every case that recurs. Some, after a second attack, clear up perfectly and do not again recur. You cannot in these cases draw any hard or fast line as to operating after a first, second, or third attack.

It is a question of considering each individual and his surroundings, but there are certain conditions under which operation should be recommended, viz.:—

1. If there have been numerous, even though slight, attacks.

2. If the attacks are increasing in frequency and severity. This is one of the most important, and it is especially strong if the last attack has been so severe as to bring the patient within the danger area.

3. If the patient is rendered a chronic invalid by the recurrent attacks, or is unable to continue at his or her employment.

4. If any of the local symptoms and signs are present in the intervals of the attacks.

The Imperial Yeomanry Field Hospital and Bearer Company.

WE have had a pretty stirring time during the last eight months. Leaving England on March 13th, on the transport "Winkfield," we had an uneventful voyage, until about eighty miles from Table Bay, when we collided with the Union liner "Mexican," at 2 a.m. in a dense fog. Three big bumps woke up most of us, and for a quarter of an hour we stood by our boats girded in life belts. We had had boat drill, the men knew their places and behaved very well. One of my colleagues caused some amusement by being found in the saloon carefully adjusting his life belt in front of the looking glass! Perhaps he expected to meet a mermaid.

Having found that we were all right we got into communication with the "Mexican" again by means of rockets, and after several hours, got off all her passengers and crew and most of the mail bags. All worked hard, and there was no difficulty in getting volunteer crews to man the boats, though the sea was running pretty heavily.

Attempts at towing had to be abandoned, as the vessel was settling down, and she sank in the night, having a big hole amidships.

When we got to Table Bay, our damaged bows, and the unusual sight of grotesquely clad females mingled with our khaki-clad warriors excited much interest, and we were speedily docked.

It is pleasing to add, as a termination of the incident, that the subsequent enquiry fully exonerated the captains of both vessels.

Having spent some tedious time at Cape Town, we went by train to Bloemfontein, visiting en route the Yeomanry Base Hospital, where we were most hospitably received by Mr. Fripp and his colleagues, and found them doing much good work.

At Bloemfontein we camped and waited, a few patients passing through our hands, until we received the 250 mules and 50 "nigger" drivers necessary to our mobility. The interesting local complaint known as the "Modders" attracted our attention. It is a form of excessive intestinal action, and is usually cured by a dose of castor oil and opium.

Leaving Bloemfontein on May 27th, we started trekking northwards to join Lord Roberts' army. We had ten ambulance waggons, each capable of accommodating four patients lying down and six sitting, while the other waggons, forage and water-carts, made up a total of twenty six vehicles; quite a formidable procession. The motive power was ten mules each with nearly all these vehicles. With regard to our ambulance waggons, I might mention that they were of excellent construction, very light and on good springs; further, they much surpassed the waggons supplied to the regular Bearer Companies, in being able to carry four lying-down cases, instead of two. All our waggons were painted a yellowish khaki, and had inscribed on them the name of the donor.

We were unescorted—the safest plan for a Red Cross body, as was soon to be demonstrated to us—and progressed peacefully as far as Kroonstad, where a vigilant garrison with strengthened outposts gave us rumours of an impending attack. However, nothing happened, and we went on peacefully until June 7th, when we found ourselves at first spectators of, and then actors in, that stirring drama which was soon widely known at home as The Roodevaal Disaster. The 4th Derby (Militia) Regiment arrived at Roodevaal Station on June 6th, and crossing the Rhenoster River camped close to the railway beneath a kopje. On the same night about one hundred and fifty men belonging to various units occupied Roodevaal Station. This station was at the time practically railhead, and was crammed with warm clothing, ammunition, stores, and three weeks' mails. During the night Christian De Wet with twelve hundred men and five guns surrounded the Derbys' camp and attacked them at daybreak. They were taken at a great disadvantage, lost heavily, and after three or four hours surrendered. Roodevaal Station garrison was summoned to surrender but refused. After a gallant resistance they had, however, to give in; a dirty white sweater on the end of a stick indicating their capitulation.

Our hospital had camped about five miles south that night, and next morning we started trekking northwards to the sound of distant guns, but we did not know where was friend or where foe, nor which way the tide of battle turned. Soon we reached a slope leading to a ridge beyond which we could see shells bursting. Then a loud explosion occurred beyond the ridge and volumes of smoke went up. This we learnt subsequently happened at Roodevaal Station. Some Yeomanry scouts, who had accompanied us from Kroonstad, rode on to the ridge and were immediately "spotted" by the Boers. They then rode back again alongside our waggons drawing a pretty brisk fire after them, one bullet going between the legs of a driver and hitting the seat. We were by this time halted, and, some Boers having ridden round to our rear, we formerly surrendered and were told to stop where we were. So we "packed" and awaited events. Our arrival on the scene was after the surrender of the Derbys', and shortly before the surrender of the station garrison. Soon a message from the Dutch reached us that we were to "come on as there was plenty of work for us to do," so we moved forward over the ridge and reached Roodevaal Station.

Here a scene presented itself which for multiplicity of interesting detail could hardly, I imagine, be surpassed. The station consisted of a few buildings of galvanised iron, one or two of which had caught fire and were burning vigorously. On the siding were trucks, some of which had also caught fire. Piled along the platform and in other places were rows of bales of clothing and boxes of stores, smouldering here and there; these were the hastily-constructed entrenchments of the, alas! defeated garrison. Heavy ammunition lay about in disorder, here was a half open packet of cartridges, there a hastily thrown down rifle. Half-opened mail bags,

spilling their contents, lay about, and here and there one saw a packet of chocolate, a tin of cigarettes, or some similar half-plundered collection of dainties. Amongst all these things moved a busy throng of men, with the purposeful activity of ants, and like them many bearing burdens. It was the intention of the enemy to utterly destroy the station and its contents, and all were told to take what they wanted then and there. Victors and vanquished were mixed in a confused mass, and our arrival on the scene only added to the complexity, for our niggers would not be restrained, and many rushed into the station to reappear with armfuls of clothing. The Dutch had rapidly ridden up, and their ponies were hitched up, or were being held outside the station, while they proceeded to provide themselves with new rigs-out. A stolid old Veldt Boer was to be seen disporting himself in the red-tabbed tunic of a staff-captain, while another had donned over his dilapidated vestments a brand new "Sam Brown" belt with sword. Phlegmatic-looking Dutch women, too, rode up in Cape carts, which they busily loaded with coffee, sugar, and other stores. The gun-carriages—ours, alas! lost at Sanna's Post—were put to a peaceful use, making journeys to and fro with stores between the station and the Boer laager. Christian De Wet, himself, sat complacently in the station-master's room, with a purloined camera slung over his shoulders, regaling himself from a bottle of gin. The prisoners, unarmed, moved about amongst their captors, providing themselves, perhaps, with new tunics, or boxes of tobacco, for was not all that was left to be burnt? Our own men, too, might have joined in the loot, but there was other work for them to do. Besides several dead there were about twelve wounded men who lay in one of the station buildings as yet uncared for, and we heard now almost with horror, of yet eighty or ninety other wounded who lay stretched on the veldt at the site of the Derbys' camp. The wounded—many seriously hurt by shell—were speedily loaded into our ambulance waggons. De Wet, interviewed, courteously allowed us to load up stores, of which we knew we should soon be in need, and also left for us the Derbys' tents, which he had previously determined to burn. Short commons, however, we anticipated for our poor mules, for much of our forage had to be thrown out to make room for the transport of the wounded.

On we moved again northward about two miles, crossing a difficult drift over the Rhenoster River, and about mid-day reached the Derbys' camp.

Here another scene presented itself; the prisoners had been taken away, and only the dead and wounded, and a few ambulance men were left in the disordered camp. Many of the tents showed shell or bullet wounds; stores, blankets, papers, kit, cricket pads and stumps, and the crumpled instruments of the band, with odd sheets of music lay scattered about. The dead had been collected into bell tents, the wounded still lay out, but wrapped in blankets, and with first field dressings applied to all through the untiring zeal of their regimental surgeon. Nevertheless our arrival was most opportune, for one man could never have coped with all the work efficiently, neither was the ordinary regimental surgical equipment sufficient. Everyone now became exceedingly busy. I superintended a rapid filling of the water-carts, while fires were speedily lighted so that sterilized water might be had in plenty. Our operating tent, a large marquee, was first erected, and the wounded were sorted out and carried into the tents luckily left standing. Others meanwhile were getting out our hospital stores and equipment, instruments, operating table, dressings, and so on. Brandy, milk, and bovril were made ready and given to those most urgently needing them. All wounds were examined, and cases for the operating tent were arranged in order of urgency. The number of these last was unusually large, for many of the wounds were shell wounds, and we worked far into the night.

The wounded men were very good and patient, and many, made comfortable and stimulated by the warm food, grew loquacious over the wonderful escapes of themselves or their comrades. One, almost unhurt himself, had had the contents of his kit bag, which lay beside him in his tent, scattered all over him by a bursting shell; another, (one of their ambulance men) produced a handful of battered coins from his breast pocket, dinted and defaced by a spent bullet, the face of Kruger on a "tickie" being the most damaged part of the collection. Here was a third "wounded" man who, in avoiding to be made a prisoner, betrayed a "slimness" worthy of his foe, for while the top of his helmet and the heel of his boot were taken off, he himself showed not a scratch. One of the officers was carrying a wounded comrade to shelter when a Mauser bullet drilled a clean hole through his nose from side to side, then passing through the head of his burden, killed him.

Next day the work went steadily on; all did well; our dressers were energetic medical students, and many of our orderlies were trained male nurses, and the work was much to their liking; meanwhile our transport men, drivers, and waggon orderlies, were busy moving tents and wounded to a clean well-ordered camp about one hundred yards away. But here, unfortunately, we were not to remain long, as the sequel will show.

While this our work was going on, you must imagine amongst us, and around us, many evidences of the presence and activity of the Dutch. They rode through our camp in twos and threes, looking at the work and here and there picking up some trifle left by the Derbys, but always respecting the Red Cross. During the night it must be confessed they stole seven of our mules, two of which were shamelessly driven by in a Cape cart next day. Their women, too, were brought up, and gazed with curious eyes upon the wounded. The General's Secretary visited the camp and coveted our operating tent; a view of its interior, however, much impressed him, and he not only let it alone, but gave stringent orders that we should in no way be molested. De Wet himself, too, visited the camp, and later two of my colleagues went off to the Boer laager, some three miles away, to attend

to some sick and wounded there. We were impressed with the discipline amongst the Boers, and we had evidence that any infraction of their military laws was met with severe punishment.

Frequent explosions were heard from, and clouds of heavy smoke were seen in, the direction of Roodevaal Station, and as darkness came on these became more weird and awe-inspiring, the greenish-white hue of bursting lyddite lighting up the sky; all along the railway by our side the rails were torn up, and close by us a wooden viaduct was burning vigorously, with occasional explosions coming from its midst.

Boers rode by us carrying fuses and coils of rope. All through the night their work of destruction continued.

On June 9th, the moving of our camp was completed, but we were not to remain long in peace, for that same evening messengers came from De Wet telling us we must move, as he was going to defend the line of kopjes in front of our camp against an attack by Lord Methuen from the north. So early next morning we were on the move, and re-crossing the Rhenoster, moved to a fresh camp about three miles S.E.

I have forgotten to mention that to us fell the sad task of burying the dead, over thirty in number, about twenty of them being laid in one grave. The short funeral service was most impressively read by one of my colleagues; wooden crosses marked the spot, and there they were left with the stillness and vastness of the veldt around them.

Our new camp was in a pretty spot, by a donga with over-hanging trees. We erected three of our commodious tortoise tents, and by mid-day had got all settled. The moving, however, was a serious business for some of our cases, and we believe determined death in two or three, more particularly two cases of amputation at the shoulder-joint for bad shell-wounds, both of which died. Such are the exigencies of war.

On the following day we were treated to a panorama of a battle. Grouped on the seats of our waggons, as on a grand stand, we watched with field glasses the progress of the fight. We saw the lyddite shells bursting over the site of our former camp, then with gladdening hearts the Boers leisurely retreating, taking their guns with them. An interval—then the scouts of Methuen's force all rode into our camp!—enquiries!—explanations!—and we were amongst friends again.

The rout of De Wet was complete. He left behind waggon loads of ammunition, which our force blew up. Before leaving him I must pay a tribute to his kindness to us personally. He gave us twenty sheep, and had he not been "otherwise engaged" would have sent us thirty more. A cable to England telling of our safety he sent into Kroonstad under a flag of truce, and it was duly transmitted. Much has been said for and against this rough uneducated man; but we can only speak of him as we found him, kind and thoughtful of our safety, respecting and protecting the Red Cross under which we worked. We remained at this camp until June 20th. Our wounded were taken to Kroonstad on the 14th, by Major Hale, Commandant of the Bearer Company;—103 cases, including 39 lying-down ones, in ten ambulance waggons; a record for sick convoy work.

Those splendid fellows, the Engineers, with the Railway Pioneers, had the railway repaired, and traffic restored, in *nine* days, in spite of the great destruction wrought, and the large temporary bridge that had to be made over the Rhenoster.

Some fifty additional patients, sick and wounded, passed through our hands while in this camp, and having sent these south by train, we continued our trek northwards. At Vredeport Road a repulsed Boer attack on the previous day put a few wounded into our hands.

On June 25th, with much rejoicing we crossed the Vaal, and two days later reached Johannesberg, and spent two days amidst palatial surroundings, so different from the wide veldt we had left. Two days later we entered Pretoria, the goal of our hopes.

Pretoria is a very different town to Johannesberg. The latter stands high and bluff on the red soil of the Witwatersrand, braving the elements. On many of the doors of its business houses, the quaint notice "Come in, closed on account of the dust!" calls to mind the boisterous wind, which is their chief pest.

In and around the town are the gold mines, with their shafts, vats, and heaps of ore. All, though now standing idle, speaks of bustling activity. Everything is modern, everything business-like.

Pretoria lies in an almost perpetual sun-bath, nestling amidst trees, and surrounded on all sides by hills. The names of its suburbs, "Sunnyside," "Arcadia," and the like, sufficiently indicate its sylvan nature. Peaceful enough the town looks, but the Volksraad buildings in its centre, and the swarms of scowling Hollanders (now happily deported) in its streets, reminds one that it is the centre, whence flowed all the varying influences that helped to bring this war upon us.

WILLIAM SHEEN.

(To be continued).

Reviews.

The price of books submitted for review should in every case be stated.

Tropical Diseases. A Manual of the Diseases of Warm Climates. By Patrick Manson, C.M.G., M.D., LL.D. (Aberdeen.) Revised and enlarged edition (Cassell & Co., 1900). Price 10/6.

The appreciation with which this book has met, is shown by the necessity for an enlarged edition within two years, in addition to three reprints of the first edition, which have taken place within that time. The book is portable, essentially practical, and gives an excellent summary of our present knowledge, and of the treatment of those diseases which are more or less limited to warm climates, while space has been judiciously economized by omitting those of which an account can be found in the ordinary text-books.

The account given of Malaria, of the methods for examining the blood for hæmatoza, and of the life-history of the parasites, both in their human host and also in the mosquito, are, as might be expected, a prominent feature, and rightly so, for this disease is the greatest scourge of many tropical districts, and when a climate is said to be deadly, it generally implies that it is malarious. It is stated by Professor Celli that in Italy alone there are 15,000 deaths annually from malaria. Buddhism has been defined as pessimism tempered by malaria. It is very largely owing to the enthusiasm and persistency of Dr. Manson, that the evidence has steadily accumulated proving that the secondary host necessary for the propagation of malaria, is the mosquito, a theory which he first expounded in 1894.

The experiment which he designed and which was successfully carried out this summer, proved to the public, in the most striking manner, the correctness of his theory.

Drs. Sambon and Low spent three months in an intensely malarious district in the Campagna and escaped malaria, by simply taking care that they were protected from mosquito bites, by remaining, except during the daytime, inside a wire-proof hut, the openings in which were all protected with fine wire-netting. On the other hand, his son, Mr. P. T. Manson, contracted malaria in London, by allowing himself to be bitten by artificially reared mosquitoes which had been allowed to feed on malarious patients in Italy, and had then been transported by post to London.

The terminology of the various stages of the malarial parasite is cumbersome, but Manson rightly insists, that it is essential for accurate knowledge, that each stage of development shall have a definite name which shall meet with the acceptance of both entomologists and physicians.

Further experience has shown that the appearance of the resting position of anopheles given in Fig. 22, is not true of all the genera. In Italy the position assumed by the body is more nearly horizontal, with the head held flexed, while culex holds its head horizontally. It is found in India that while rheumatic fever is rare, endocarditis is common, especially on the right side. In the post-mortem room at Lahore it is found that puckered valves and cardiac degeneration are common, and that fungating endocarditis is much more common than is the case at Guy's Hospital. It is very probable that these lesions are the result of malaria, but the possibility of such sequelæ are not referred to in this book.

The group of tropical diseases affecting the abdominal viscera, are very important; they are briefly and clearly described, while especial stress is laid on the practical details of treatment.

The lacunæ in our knowledge of many questions are indicated, and will form a valuable stimulus to those who may be using the book as to the profitable lines upon which to direct their researches.

The last quarter of the book consists of a brief description of the various diseases due to animal parasites, and there is no doubt that at present we are familiar with only a small proportion of the diseases which in the tropics own such origin, and that a careful practical study of cases, with the clear diagrams and accurate accounts of those parasites with which we are already familiar, which are given in this book, will lead to a great increase in their number.

The book is well printed and illustrated, and its use will not be limited to those practising in the tropics, but it will form an authoritative and reliable reference for the diagnosis and treatment of those cases of tropical disease which are constantly finding their way to England.

Appointments.

MEDICAL SCHOOL APPOINTMENTS.

The following appointments have been made by the Medical Council and approved by the House Committee:—

Clinical Assistants in Medical Wards.—Messrs. G. G. Davidson (Dr. Taylor); M. J. Rees (Dr. Hale White); E. H. Kitchin (Dr. Pitt); T. H. B. Dobson (Dr. Perry).

Ophthalmic Dressers.—Messrs. K. V. Trubshaw, R. Thompson (February 1st) (Mr. Higgens); E. J. F. Hardenberg, F. B. Manser (February 1st) (Mr. Brailey); J. A. B. Hammond, E. C. Bevers (March 16th) (Mr. Higgens); E. P. Mitchell, M. D. Wood (March 16th) (Mr. Brailey).

Surgeons' Dressers.—Messrs. F. M. M. Ommanney, H. J. Gater, G. Moir, A. H. Turner, G. B. S. Soper, A. J. Urquhart (Mr. Howse); A. C. Osburn, G. E. Malcomson, A. H. E. Wall, H. Barber, A. E. H. Pakes, A. J. Beadel (Mr. Lucas); B. Churchill, J. C. Curtis, N. N. A. Houghton, W. W. C. Jones, T. G. Miles, W. A. G. Stevens (Mr. Golding-Bird); W. H. Bowen, M. W. Cohen, F. H. Parker, F. L. Thomas, P. N. B. Odgers, W. C. Lewis (Mr. Jacobson).

Externs.—Messrs. T. F. H. Roberts, H. W. Brown, W. M. Robson, A. Wylie, H. A. Ehrlich, G. H. H. Manfield (February); D. R. T. Griffiths, G. Evans, C. E. Gaitskell E. G. Allport, R. C. Lawry, H. A. Cutler (March); G. T. Wrench, F. C. Wetherell, M. A. Collins, A. C. H. Gray, C. Tessier, D. H. Trail (April).

From the Gazette's Special Pathologist.

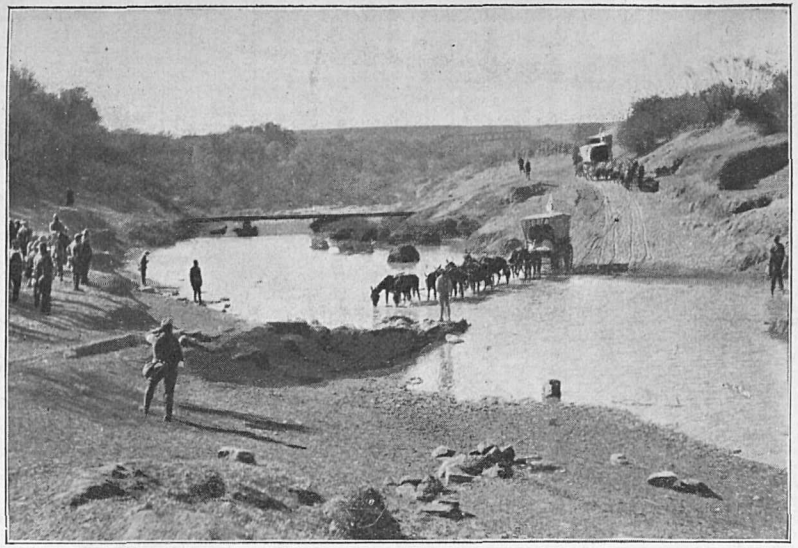
NOTICES.

L., WOOLWICH.—Received on 10th January, 1901.—No tubercle bacilli were found in the sputum.

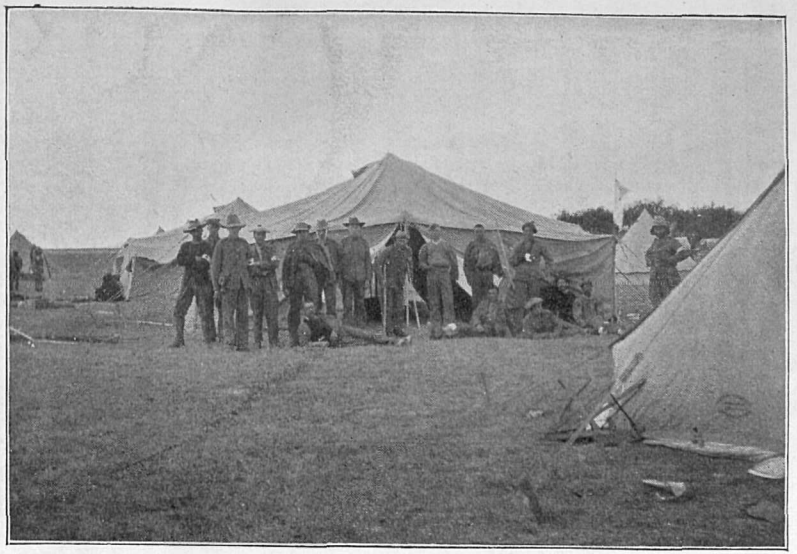
X. Y. Z., HASTINGS.—Received on 7th January, 1901.—No tubercle bacilli were found in the specimen.

X. Y. Z., HASTINGS.—Received on 9th January, 1901.—No tubercle bacilli were found in the sputum.

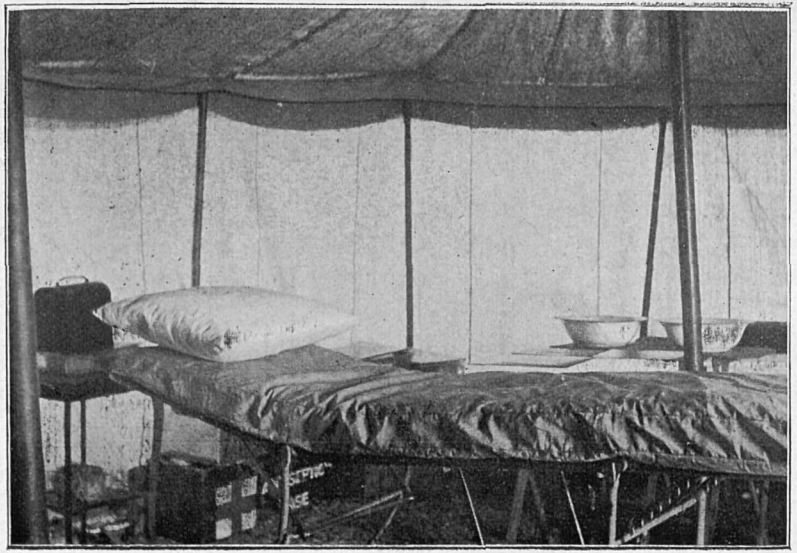
PATHOLOGIST.



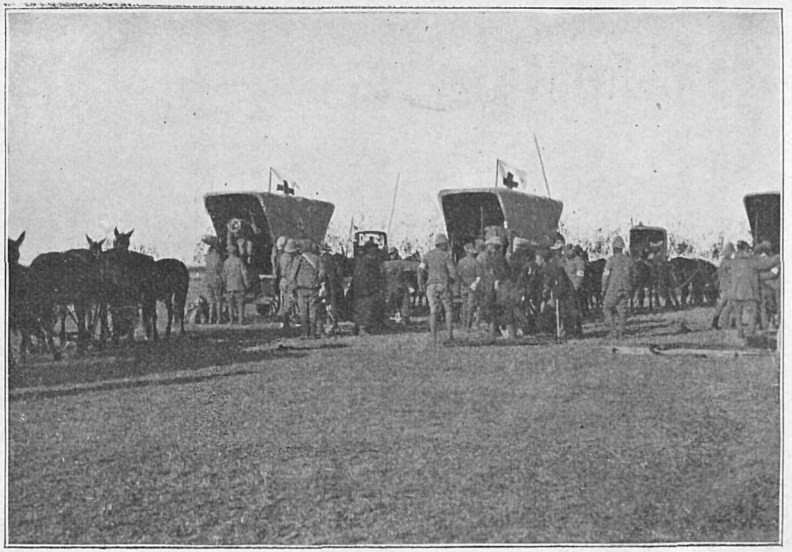
Drift over Modder. Ambulance Waggons crossing.



Tortoise Tent and writer's Patients, Roodevaal.



Operating Tent, Roodevaal.



Loading Wounded. Prospect of being shelled.

Passim.

THE Physical Society held their first meeting in the new year last Saturday, January 12th, when clinical cases were shown and discussed. There was an unfortunate lack of surgical cases. Medical cases are sufficiently interesting, but conditions are not favourable at such a meeting for such a proper examination as is necessary to enable one to intelligently discuss the diagnosis. Furthermore, we would suggest that on future occasions the clerk be instructed to point out briefly the leading points both in the history and in the condition of the patient, rather than to read through a detailed medical report in an unintelligent monotone. Due attention to such a recital is at least irksome, if not almost impossible. The one and only surgical case gave rise to more interest and discussion than any other. Here for the first time the authorities present broke their previous silence and gave the benefit of their knowledge and experience to the meeting. We understand that Mr. Brydone will be unable to read his paper before the Society on January 26th, in which case the next meeting will probably be a pathological one.

ONCE again the all-absorbing topic of cup-ties is before us. The first Association Cup-tie match has already been played against St. Thomas's and has resulted in an easy win for us by five goals to nil. The whole team played in excellent form, and had it not been for the assiduous and ever-watchful goal-keeping of our opponents, our scoring would have been still more heavy. This afternoon the teams are to try strength with East Sheen for the Surrey County Cup, and we wish them good luck. On Wednesday, January 30th, Guy's is to meet Mary's for the Rugby Inter-Hospital Challenge Cup.

LAST year, as every one remembers, the Rugby Cup was wrested from us after a brief stay of two years, and the time is now drawing nigh when our Fifteen must strive to restore our prestige, which in the athletic world is somewhat faded. Training thoroughly and earnestly is the only staff on which it is safe to lean. It is now generally recognized that a lack of true keenness, not only among the members of the team, but throughout the hospital, was alone responsible for our defeat last year. With a new century let us start a new athletic era, and let us strive to place the name of Guy's first on the century list. The Cup is almost within our grasp and a few hours daily spent by each member of the team will ensure its safe return to the smoking room. Anyone who has trained will admit that it is not all pleasure, but the result is surely worth working for. We hope that this year the whole hospital will clothe itself with renewed keenness, and that Guy's supporters will not stand sullenly round the ropes, when our men are perhaps a little off colour, though striving their utmost, as we have seen on former occasions.

THE Debating Society will hold its third meeting of the session on the date of issue of this GAZETTE, at which Mr. Griffin will make onslaught against the rights of heredity, and will endeavour to prove to his own satisfaction, and to that of those present that "The House of Lords ought to be abolished." Mr. Kitchen will complete the demolition of that noble edifice, while Mr. A. E. Pakes has undertaken the formidable task of sitting upon Mr. Griffin, and is, we believe, to be assisted in the operation by Mr. Wales. These meetings have become so popular of late, that it is not necessary for us to say anything in support of the Society, but we would like to see more junior members taking part in the debate. The object of these meetings is not that a few gifted orators should amuse the rest with their witticisms and smart retorts, but that opportunity should be given to men to accustom themselves to address their *confrères* intelligently and concisely on any subject, and to lose that nervous diffidence, which is inherent in most of us, and which is soon lost with a little practice. It is certainly preferable to gain one's experience in these matters amongst one's colleagues and friends than later on to find oneself compelled to make a start amongst absolute strangers. We hope, therefore, this next meeting may prove a record one for maiden speeches.

THE Sisters, Nurses, and others of Guy's Hospital have presented a handsome silver coffee service to Miss E. H. Young, together with an address, expressing their regret at her resignation, and their appreciation of her work during the time she has been amongst them.

MISS SARAH A. SWIFT, Lady Superintendent of the Nursing Institute, has been appointed Matron of the Hospital. Sister Sarah is eminently qualified for the position both by her own personal qualities, and by the extensive and varied experiences she has had in nursing, management and organisation. She has been in the nursing world since before 1877, when she commenced nursing as Probationer at Kaiserwurth. She then did a three years' course as Probationer at the Royal Infirmary, Dundee. After this she became Acting Matron at the Home for Incurables and District Nurse at Dundee, where she remained till 1886. She then went to Liverpool as Ward Superintendent to the City Infirmary. In 1888 she came to London as Night Superintendent at the London Fever Hospital, and in 1889 she was out in Constantinople as Sister to the Seamens' Hospital. In 1890 she came to Guy's as a Lady Pupil, and in 1891 she was appointed Assistant Matron. In 1893 she was appointed Lady Superintendent of the Nursing Institute, and has held that position ever since. At that time the GAZETTE expressed much satisfaction at her appointment and predicted great things for her in her new sphere, all of which has been more than realized, and we have no hesitation in prophesying equal success for her in her present position. We feel sure that not only she herself, but everyone else is to be congratulated on the appointment, and we can assure her a hearty welcome on all sides.

THE removal of Sister Sarah from the Institute to the Hospital necessitates a change in the other direction, and although we must congratulate Sister Miriam (Miss M. N. Oxford) on her appointment as Lady Superintendent of the Nursing Institution, we cannot help expressing our sorrow at losing such an old friend from the hospital. Sister Miriam has spent over twenty years at the hospital. She came in 1880 as lady pupil, and in 1888 she became Sister of the Eye wards. In 1890 she spent a short time in Dorcas, and was then appointed Sister of Philip ward, where she remained till last year, when she came into Clinical. We feel sure she will be as popular at the Institute as she has been at the hospital, and we wish her every success in her new work.

SISTER JOB (Miss Strick), formerly Sister Naaman, is to come into Clinical, and Miss Holman (Sister Cornelius) has been appointed Sister Job. We understand that the vacancy in Cornelius has not yet been filled, and may possibly be filled by one of the sisters returning from South Africa.

IF the pen be a potent weapon in the doings of men, then undoubtedly fiction is more powerful than fact, but perhaps we nowhere find a more entire disregard for the truth than in the unscrupulous, irresponsible outpourings of fanatics and faddists. They found their principles on crass ignorance and misconception, and hysterically convinced of the righteousness of their cause, they support and promulgate their doctrines by outrageous distortions of facts and criminal insinuations. A somewhat elaborate pamphlet has lately fallen into our hands, issued by those most misled and misleading of faddists—the anti-vivisectionists. In this they endeavour to close the purses of the charitable to all institutions which have on their staff men licensed to operate upon animals for purposes of research. Such institutions are printed in *red ink* (highly suggestive of Mephistophilian practices!), with a full list of the names of these terrible outcasts of humanity. Guy's looks one of the reddest!

ALL this is innocent and straightforward, but to carry their point home they must prove, or at least insiduously suggest, that the charitable, in supporting these institutions, are supporting the malevolent practices against which they are crusading. This they do by a paragraph, also in red, placed in a separate column opposite the name of the

institution. By the most extraordinary perversion of facts and by the basest insinuations, they make it appear to the ingenuous reader, that, for instance, at Guy's, the Medical School, at which these evil doings are carried on, is at least in part dependent upon the hospital and supported from its funds. One instance will be sufficient to show the contemptuous puerility of their methods of procedure. A paragraph runs thus:—"A sum of £51,000 has been borrowed to build the school (Report for year 1897, p. 35), but we are not informed whether it was borrowed by the hospital or the school." On referring to page 35 of Report for 1897 we find that there is no mention of borrowing and that the subject-matter has no reference to accounts at all, but is an appeal for subscriptions and donations towards research and education in the Medical School. For this purpose a statement is made of the sums required, of which one item is "To extinguish the present debt, £51,000." Anyone who cares to take the trouble can ascertain for themselves that this sum lent to the Medical School has been largely subscribed by the Staff, and that the Medical School is entirely independent of any hospital funds whatever. But such ungarnished truth would not meet the requirements of these gentlemen.

THIS indictment of Guy's finishes by placing before the reader a choice between two alternatives, either that a statement made in the report "is untrue or that the audited accounts are false." Presumably the auditors even are tainted with the immorality pervading the institution! The pamphlet is a re-dish-up of an article which appeared last year in one of the periodicals, in which the most wild accusations were made against the leading hospitals. When one reads such obviously planned and intentional calumny, it seems almost inconceivable that anyone should descend to such depths of moral degradation with the ostensible purpose of reforming mankind.

Two donations of £1,000 each have been received towards the Sustentation Fund. One of them has been given by one of the Governors of the Hospital, making altogether the grand total of £10,000 subscribed by this same gentleman within the last few years. The second donation has been given by Mr. George Richmond to support a bed in memory of the late Mr. James Richmond.

A NEW and carefully revised map of the maternity district for Guy's has been prepared at considerable expense and trouble for the use of the externs and nurses, and can be obtained at the Medical Office at the price of one shilling. By an arrangement with St. Thomas's Hospital the boundary has been extended somewhat in their direction, so as to include a triangular area between Blackfriars Road and Waterloo Road, which latter now forms the extreme western boundary. A small hitherto doubtful area on the eastern side has also been included, so that the eastern boundary runs from the Southwark Park Road along Rouel Road, Jamaica Road and Vienna Road. On the other hand, a large portion of the entire district, namely, the whole area lying west of the Southwark Bridge Road, has been apportioned to the nurses, so that the area to be traversed by the externs is, on the whole, somewhat diminished. This division of the district into separate areas for nurses and externs respectively is much more satisfactory than the hitherto indiscriminate distribution of cases between them.

THE annual report on the Out-patient Department shows that 31,555 new patients were treated during the year 1900, as compared with 27,953 in the previous year—that is, there was a total increase of 3,602 new patients, or an average increase of five patients per diem. The average number of new patients seen per diem amounts to 112. Of these, the

Dental patients represent...	37	per cent.
Medical " "	24	"
Surgical " "	14	"
Eye " "	10	"
Skin " "	5	"
Obstetric, Ear and Throat patients represent each	2—3	"

The total number of patients who on investigation were found to be ineligible on account of their pecuniary condition amounted to 155.

WE publish elsewhere a further subscription list to the South African Memorial Fund. We are glad to see that the Firm of Mr. Jacobson has led the way by subscribing 30s. towards the fund. We hope this excellent example will be followed shortly by similar donations from the other Firms.

A GORDON lectureship in experimental pathology is about to be established in consequence of a bequest made by Mr. Robert Gordon to the Medical School for this purpose. We publish elsewhere further particulars. The income from the trust fund amounts to £250. A course of at least twelve lectures will be required during the year, and the lecturer will be expected to devote his time to pathological research, and will not be allowed to hold any other office or appointment which in the opinion of the Board would interfere with his duties as lecturer.

WE learn that the Guy's Hospital London University Club meets for their Annual Dinner on Friday, January 25th, at the Café Royal. This club is certainly one of the largest of our Guy's clubs, numbering more than one hundred and fifty members, who are undergraduates or graduates of this University. It is in a most prosperous state numerically and financially. Of recent years it has been the custom of the committee to invite prominent Guy's men—not London University Graduates — to be their guests at each annual dinner, and Dr. W. H. Crosse, of Nigeria, Dr. Mallard, V.C., and Dr. Goodhart, have been among those invited, and this year Dr. Cooper Perry, as a member of the new Senate of the London University, has been invited to meet the Club, over which Dr. Stevenson will preside on this occasion. It is scarcely necessary to point out to men that they should join, while they are at the hospital, with a batch of their contemporaries, as after leaving Guy's the yearly reunion is always pleasant and profitable. We hope Mr. C. H. Fagge, the hon. sec., will have a good list of new members to enroll this year.

THE Dental Society held a very successful meeting on Friday, January 11th, when Mr. Black read an interesting paper, which we publish elsewhere, on Dental Caries. We understand that there was a record attendance, and many distinguished members were present. The peculiar and characteristic delivery which Mr. Black adopted in reading his paper rendered it amusing as well as instructive. The sixth annual dinner of the society will take place on Saturday, February 9th, at the Hotel Cecil. Tickets, 6s. each, may be had of Mr. Bowl, hon. sec.

DR. NANSON, an old Guy's man, has lately resigned his duties as honorary medical officer to the Stratford-on-Avon General Hospital, after holding this position for over forty years, and we have much pleasure in noting that his services have received substantial and worthy recognition. At a most enthusiastic meeting held at the Town Hall on the 31st ult., and presided over by the Marquis of Hertford (president of the hospital), Dr. Nanson was presented with a portrait of himself in oils, to be hung in the committee room, a service of silver plate, and an illuminated address. We offer him our most hearty congratulations for this well-merited appreciation and reward of his labour.

WE are requested to announce the fact that the Society of Medical Phonographers offer for competition among registered medical students in the United Kingdom a first and second prize, valued £5 and £3 respectively, for proficiency in the groundwork of phonetic shorthand. The examination is to be held in May, the latest day of entry being April 15th. Further particulars may be obtained of Messrs. Pullman and Son, Thayer Street, Manchester Square, London.

THE Students' Calendar, and also the Dental Students' Calendar for the year 1901 are now ready, and can be obtained at the medical office; also the circular showing the dates on which the various prize examinations of the school will take place in the present year.

Hospital News.

CLASSIFIED LIST OF CASES.

In the Medical Wards.

CASES UNDER DR. TAYLOR.

MARY
38. Typhoid.
39. Enlarged heart. Mitral stenosis. Fibroid lung.
40. Typhoid. Peripheral neuritis.
41. Gastric ulcer.
42. ? Hodgkin's disease.
43. Aortic and mitral stenosis and regurgitation.
44. Gastric ulcer.
45. Tuberculous kidney. Nephrectomy.
46. Malignant growth of uterus. Secondary deposit in liver.
47. Acute rheumatism. Sixth attack. Mitral regurgitation.
48. Appendicitis.
50. ? Gastric ulcer.

Cot
56. Broncho-pneumonia.
57. Pleuritic effusion following pneumonia. Abdominal abscess. ? Appendicular. Laparotomy.

PHILIP
21. Stomatitis.
22. Phthisis. Periostitis.
23. Acute nephritis.
25. Acute rheumatism.
27. Typhoid. Relapse.
28. Mitral stenosis and regurgitation. Chronic peritonitis. Ascites.
29. Mitral stenosis and regurgitation.
30. Chorea.
31. Tubal nephritis.
32. ? Hepatic abscess.
33. ? Fibroid lung. Thickened pleura.
34. Pleuritic effusion. ? Empyema.
37. Fractured ribs. Pneumonia.
39. ? Aortic aneurysm.

CASES UNDER DR. HALE WHITE.

MARY
14. Abdominal tumour. Sarcoma of ? Stomach. ? Adrenal.
15. Mitral regurgitation. Enlarged liver.
16. Cerebral tumour. Trephining.
18. Acute rheumatism. Mitral regurgitation.
19. Typhoid. Convalescent.
20. Mitral stenosis and regurgitation.
21. Gastric ulcer. Hæmatemesis.
22. Carcinoma of cervix. Secondary deposit in spinal cord.
23. Peliosis rheumatica. Mitral regurgitation.
24. Diabetes mellitus. Typhoid.

PHILIP
1. Acute nephritis.
2. Mitral stenosis and regurgitation. Enlarged liver.
3. Diabetes mellitus.
5. Chronic interstitial nephritis with acute tubal.
6. ? Mitral stenosis and embolism in spinal cord.
8. ? Typhoid.
9. Epilepsy.
10. Phthisis. Tuberculous laryngitis.
12. Broncho-pneumonia.
15. ? Growth of kidney.
17. Phthisis. Fibroid lung.
19. ? Cirrhosis of liver.
20. Acute rheumatism. Mitral regurgitation.

CASES UNDER DR. PERRY.

MARY
1. Phthisis.
2. Morbus cordis. Mitral and aortic murmurs.
3. Rheumatism.
4. Bronchitis.
5. Chlorosis.
6. Pneumonia.
7. Enlarged spleen. Mitral regurgitation. Anæmia. ? Pericarditis.
8. Eczema.
10. Anæmia.
11. Anæmia. Anæsthesia.
12. Peripheral neuritis.

Cot
51. ? Meningitis.
52. ? Broncho-pneumonia. ? Abscess in pharynx.

STEPHEN
1. Thrombosis of veins.
4. Rheumatism. Mitral and aortic disease.
5. Typhoid.
6. Mitral and aortic disease.
8. Typhoid.
10. Mitral and aortic disease.
12. Stomatitis.
13. Bronchitis.
14. ? Hodgkin's disease.
15. ? Empyema. ? Growth.
17. Aortic and mitral regurgitation.
18. Pneumococcal empyema.

CASES UNDER DR. PITT.

MARY
25. Intestinal obstruction. Colotomy.
26. Enuresis.
27. Growth of chest.
28. Failing heart.
29. Tuberculous peritonitis. Fæcal fistula.
32. Pleuritic effusion.
35. Chlorosis.
37. Aortic disease. ? Adherent pericardium.

STEPHEN
21. Phthisis.
22. Internal hernia operation.

STEPHEN	23.	Acute rheumatism. Mitral disease.
	28.	Tumour of corpora quadrigemina.
	29.	Chronic Bright. Pleurisy and pericarditis.
	35.	Epileptiform convulsions.
	37.	Insular sclerosis.
	38.	Insular sclerosis.
	39.	? Cerebellar tumour.
	40.	Multiple melanotic sarcomata

In the Surgical Wards.

CASES UNDER MR. HOWSE.

ASTLEY COOPER	12.	Lacerated hand.
	19.	Fractured femur.
	20.	Bullet wound of hand.
	23.	Scalded arms.
JOB	5.	Inguinal hernia. Radical operation.
	8.	Hæmatoma of buttock.
LYDIA	7.	Sarcoma of breast.
	11.	Bunion.
Cot A.		Fractured femur.

CASES UNDER MR. LUCAS.

LAZARUS	9.	Tuberculous cervical adenitis.
	11.	Varicocele and vaginal hydrocele.
	21.	Recurrent epithelioma of glands.

CASES UNDER MR. GOLDING-BIRD.

LUKE	4.	Inguinal hernia. Radical operation.
	5.	Varicocele.
	11.	Varicocele.
	17.	Concussion.
CHARITY	4.	Sarcoma of breast.
	6.	? Suppurative arthritis of ankle.
	12.	Subacute prepatellar bursitis.

CASES UNDER MR. JACOBSON.

ASTLEY COOPER.	4.	Injury to abdomen. Peritonism.
	8.	Fractured femur.
CORNELIUS	6.	Meningeal hæmorrhage (since dead)
	13.	Pott's fracture.
NAAMAN	6.	Sarcoma of parotid gland.
	7.	Old infantile paralysis. Arthrodesis. Trophic ulcer.
	10.	Old separation of inferior tibial epiphysis.
	11.	Enlarged prostate. ? Carcinoma.
DORCAS	8.	Exopthalmic goître.
	11.	Hammer toes.

CASES UNDER MR. SYMONDS.

JOB	13.	Hypertrophy of tonsils.
	19.	Hypertrophy of tonsils.
PATIENCE	4.	Chronic pyæmic arthritis of knee-joint.
SAMARITAN	10.	Necrosis of phalanx of toe.

CASE UNDER MR. LANE.

PATIENCE	"Stretcher."	Mammary abscess.

CASES UNDER MR. DUNN.

LUKE	2.	Inguinal hernia. Radical operation.
CHARITY	19.	Recurrent scirrhus of breast.
PATIENCE	2.	Erysipelas of chest and arms.

CASES UNDER MR. FRIPP.

NAAMAN	19.	Tuberculous cervical adenitis.
DORCAS	21.	Carcinoma of breast.
SAMARITAN	8.	Gummatous necrosis of olecranon.

Dental Caries.

A Paper read before the Guy's Hospital Dental Society on Friday, January 11th, 1901, by KENNETH BLACK.

MR. PRESIDENT AND GENTLEMEN,—Dental Caries, which forms the subject of this paper, is to medical students and practitioners perhaps one of the most difficult and at the same time interesting of odontological problems; difficult, because its ætiology has never been clearly defined, and interesting because of the wide range of considerations it embraces.

It is now generally agreed that the immediate cause of caries is "*acids plus germs.*" The acids dissolve the inorganic salts of the tooth, and the bacteria later on peptonise, that is make soluble, the collagenous matrix.

The presence of these acids in the mouth has been accounted for in several ways. They may be directly taken in food or medicine, or be erructed from the stomach, or the secretions of the mouth may become acid, and lastly and most important of all, the food lodged on or about the teeth may undergo acid fermentation by the agency of certain micro-organisms present in the mouth.

This fermentation occurs in carbohydrate food which lodges on the teeth. The ptyalin of the saliva acting on the starch or dextrin results in the formation of sugar, chiefly maltose, and the bacteria further convert this into lactic, acetic and butyric acids. Or the bacteria themselves may convert carbohydrate food into acid without the aid of ptyaline. Thus, as a result of this lodged food a comparatively concentrated acid is produced, which, if allowed to remain in contact with the enamel of the tooth, will cause its decalcification. The acid firstly dissolves the calcified matrix, and so, penetrating into the enamel, causes it to become soft, and secondly, the enamel prisms are dissolved.[1]

This process goes on until the enamel is eaten through and the dentine exposed. Then the same or other bacteria penetrate along the dentinal tubules and dissolve the inorganic salts of the dentine matrix, and later the same or other bacteria peptonise the organic matrix. Thus caries is developed.

The essential cause of caries, therefore, is the acid fermentation of carbohydrate food lodged on or about

[1] Leon Williams, Dental Cosmos, July, 1898.

the teeth leading to the destruction of the enamel, and the consequent exposure of the dentine to bacteria.

Although this is the immediate cause of caries, a little reflection will show that there must be some other factor at work which favours this process in the development of caries; because we have reason to believe that the mouths of all animals, domesticated or wild, and man, civilised or uncivilised, contain the necessary bacteria and lodgment of food, and yet caries is almost unknown in animals and uncivilised man.

As to the nature of this other factor, various views have been put forward:—

1. That the early use and cultivation of the brain among civilised races, at the expense of the nutrition of the body, has deprived the tooth-germs of the phosphates that are necessary for their proper calcification, leading to poorly calcified teeth, which are then more easily attacked by the acid fermentation of the food lodged on them. This seems very improbable, as histologically the human tooth is as nearly as can be a perfectly developed tissue, and is as perfectly calcified in civilised as in uncivilised races; and chemical analysis shows that enamel contains about 96 per cent. of inorganic salts, 4 per cent. of water, and practically no organic matter; and of the inorganic salts 90 per cent. is calcium phosphate—(bone contains about 51 per cent. of calcium phosphate). Then again, the first molar tooth is the most highly calcified[2] yet it is the most frequently carious[3]. Under certain morbid conditions, it is true that the teeth are badly calcified, such as in congenital syphilis, general ill-nourishment of the fœtus or child during the development of the teeth, the use of mercury, and the exanthematous fevers; but of these influences I do not propose to treat, they predispose the teeth to caries, but are themselves not the predisposing cause of more than a limited number of cases.

2. Another view that has many supporters is, that the artificial dietary of civilised races causes the teeth to be used very little for the purpose of mastication; and further, that in the manufacture of many artificial foods, such as bread, the fibrous portion of the wheat is eliminated, which, naturally, would have a cleansing action on the teeth, and thus these prepared foods cling to the teeth more easily. And hence, from insufficient use and the want of natural cleansing, the teeth decay. This theory, as it stands, seems improbable considering that some, whose teeth are very little cleaned, never have caries; and on the other hand, others, who take the greatest care of their teeth, and whose foodstuffs are similar, are prone to caries.

Among uncivilised races caries is rare,[4] and yet these races are not familiar with the use of the tooth-brush, the antiseptic mouth-wash, and the tooth-powder. Some few may polish their teeth for the sake of appearance, but not to prevent decay. And moreover, among civilised races the wealthier classes do, and the poorer classes do not, take care of their teeth; and yet statistics prove that caries is not more common among the latter than among the former.

These facts indicate that caries must be due to some general condition that is prevalent in civilisation.

Granted that caries can attack teeth of normal calcification, that lodgment of food is essential to the process, and that the necessary bacteria are present in every mouth; it is clear that we might find the determining cause of caries in some condition of the mouth, which would either favour the growth of these bacteria, or fail to neutralise the acids they produce.

Generally speaking, bacteria flourish and are most active in a medium of a certain alkalinity, varying within considerable limits; therefore, the mouth, which is normally alkaline and at the temperature of the body, presents a great opportunity for the growth of bacteria. Then again, many bacteria are destroyed and others become passive in an acid medium; so that, when the contents of the mouth become acid, many bacteria are destroyed whilst others remain passive. But some of the acid producing bacteria can flourish extremely well in an acid medium; therefore the general reaction in the mouth may not be the factor which determines the growth of the necessary bacteria, it being possible that they may flourish both in an alkaline and slightly acid medium. But as almost all the bacteria which have been brought into relation with caries prefer an alkaline medium, it is more probable that the reaction in the mouth will have considerable influence in determining whether the acids produced by fermentation of the lodged carbohydrate food are neutralised or not; for if neutralised by alkali, the enamel will not be attacked, but if unneutralised it must be gradually dissolved.

Human saliva, as secreted by the salivary glands is normally slightly alkaline. The alkalinity of the parotid saliva, which is secreted continuously, is the least, and that of the sublingual saliva, which is secreted during mastication, the greatest.

We have to consider whether or under what conditions the alkalinity of the saliva may disappear; because, if it did disappear for a sufficient time in any given mouth in which lodgment of food took place, the enamel ought to be dissolved and caries set up.

Now, the saliva secreted does, more or less completely, lose its alkalinity, or even become slightly acid in any condition of prolonged digestion of food in the stomach; and hence it loses its power of neutralising acids formed by fermentation in the mouth.

We need not pause to consider how prolonged gastric digestion brings about this decrease in the alkalinity, or even acidity, of the saliva; it is only necessary to point out that prolonged gastric digestion is found coincidently with nearly all cases of indigestion or dyspepsia, whether brought about by indiscretions of diet, general states of ill-health—such as are found in anæmia, consumption,

[2] Tomes and Black.

[3] Tomes' Dental Surgery, fourth edition. Statistical Tables, p. 246, et seq.

[4] It should be noted that all uncivilised races are not meat or fat-eaters.

at the menopause and many other conditions—or by the specific fevers.

The fact can easily be demonstrated by testing one's own mouth with litmus paper. During a meal or directly after, its alkalinity is at its maximum, and this decreases and is at its minimum in a few hours. Then, if a heavy meal has caused prolonged gastric digestion, it will be found, after a longer period, that the saliva has become still less alkaline or even has become acid. This is best marked after a heavy dinner, and in the morning the saliva will generally be found to be acid, due to excess of food prolonging the gastric digestion.

We have now to consider whether or not the theory that has been put forward will explain the various facts of caries with its almost complete absence in animals and uncivilised man.

Caries in children.—Among civilised women, the claims of society, physical or mental work, too often prevent a mother suckling her child. A new-born infant from improper dieting rarely ever has a good digestion, and the error in dieting is perhaps the chief cause of infantile mortality—(mortality under the age of one year). The child is brought up by hand and fed on cow's milk, with generally other substances that cannot be properly digested, so irritating the stomach and causing dyspepsia, which becomes chronic. Then, when the teeth errupt, they very soon decay on account of the resultant acid state of the secretions of the mouth indirectly favouring the production of caries by their inability to neutralise any acids produced locally by bacteria. The teeth when decayed further tend to keep up the state of chronic dyspepsia by rendering mastication more difficult. As the child grows it becomes stronger, but is left with a very irritable stomach, upset by the least error in the dieting. This may account for the fact that caries is extremely prevalent among children.

Heredity of caries.—Not infrequently families exist to whom indigestion is hardly known, and in the few observations that I have been able to make it appears that in those families who are not troubled with indigestion the teeth are sound, and vice versâ, in families among whom indigestion is the rule, decay of the teeth is prevalent. It is generally stated that heredity has an influence over decay. No doubt irregularities of the teeth may be inherited and be a predisposing cause of caries by favouring the lodgment of food; but actual causes of decay are hardly likely to be inherited, because many parents with bad teeth have children whose teeth are sound, and others with good teeth have children whose teeth are carious.

Age and incidence of caries.—Caries is commoner before the age of twenty and after the age of forty than between these ages. And statistics prove that dyspepsia is much less common in middle age than in early and advanced years.

Sex.—In women caries occurs more often than in men, and yet women, as a rule, take much greater care of their teeth than men. It has been stated that the enamel in women is less highly calcified than that in men,[5] but this has never been confirmed. It should also be remarked that in women indigestion occurs more often than in men.

Women have a habit of tea-drinking; this habit, when the tea is taken in excess, causes indigestion; even one cup of tea may cause the almost immediate production of organic acid in the stomach. This fact, but in a lesser degree, applies also to coffee. Tea taken with fresh meat causes prolonged gastric digestion, but not when taken with dried meat; hence, at meals, fresh meat should never be indulged in if tea is taken. With regard to men, they drink far less tea than women, and at meals often take an alcoholic drink, which in moderation and excepting some kinds of beer and sour wines, accelerate digestion. These facts alone will largely account for indigestion being more common in women than in men.[6]

Pregnancy and caries.—It is well known that women with sound teeth who have several consecutive pregnancies or who have prolonged lactation frequently suffer from caries of the teeth, and in a few years often a set of teeth is destroyed. It is equally well known that the same conditions cause chronic dyspepsia. In France there is a saying, "For every child born, a tooth lost."

Influence of smoking.—Smoking is commonly believed to preserve the teeth. Tobacco smoke is alkaline to litmus paper, and this naturally will, to some extent, tend to preserve the alkaline state of the mouth, and so act in some degree in preventing decay, that is if caries is predisposed to an acid or neutral state of the secretions of the mouth. And then again, tobacco smoke contains pyridine compounds and volatile cresols, which are decidedly antiseptic; tobacco smoke passed through a virulent culture will sterilise it.[7]

In connection with the subject generally, it may be stated that among the highest castes of India the teeth are splendid and the digestions excellent. Their diet is simple and they are chiefly vegetarians; their religion requires simple living and strict cleanliness of the body; water and pieces of wood are provided after every meal, the mouth rinsed out and the teeth scrupulously cleaned. This is not a custom to prevent decay of the teeth, but is part of the religious idea of cleanliness.

With regard to the lower castes of India, they are more largely meat eaters, dieting more like Europeans, and both caries and dyspepsia are not infrequent among them.

In the instance of a high caste Hindu, who came under my observation, he had a splendid set of teeth previous to his arrival in Europe, but the change of living soon caused him to become dyspeptic, and although he took the same care of his teeth as formerly, nevertheless in a few years his teeth became carious.

[5] Von Bilra, see Tomes. Dental Anatomy. Fifth edition, p. 11.
[6] Lauder Brunton. Disorders of Digestion. 1886.
[7] Goadby.

Rarity of caries in the lower animals.—Animals have normally a saliva much more alkaline than that of man, and though domesticated animals suffer from indigestion their saliva possibly never wholly loses its alkalinity. Again, it is possible that uncivilised man, who undoubtedly occasionally suffers from dyspepsia, secretes a saliva more alkaline than that of civilised man: this has not been tested, but is a point worthy of investigation.

Indigestion is very common among domesticated dogs, due to improper feeding, especially among pet dogs. This is, in part, due to the fact that these dogs are largely fed on carbohydrate food, such as sugar, sweet biscuits, etc., and as the typical carnivora have no ptyalin in their saliva, this kind of food is never properly digested. Caries is practically unknown, although erosion is not uncommon, in domesticated dogs. Tartar deposits are very common, and often so excessive that they cause recession of the gums and alveolar processes, with consequent loss of the teeth; thus the teeth of pet dogs have often to be scaled. This gives a very good example of the alkalinity of the saliva of the dog, as tartar is only deposited when the saliva is alkaline, and furthermore the parotid saliva of the dog is very rich in calcium bicarbonate.[8]

It is stated that caries is not uncommon in the domesticated horse. This, however, is altogether misleading. Professor Hobday[9] informs me that the term *caries* is loosely used by many veterinary surgeons to denote any diseased condition of the teeth or periodental membrane, and that true caries is of extreme rarity in the horse, but that indigestion is not uncommon.

Returning to the subject generally, there is a form of caries in which the surface of decay is hard and black, and this condition extends into the dentine. This clearly shews that at one time these teeth were attacked by caries, the enamel destroyed and the dentine calcified and softened, and later the process of decay arrested and the decalcified dentine hardened. Probably this condition is due to the subject having a previous chronic acid or neutral state of the mouth giving place to a normal alkaline state. This continuous alkaline state of the saliva will not only stop the further process of decalcification by neutralising any acids produced, but probably precipitates a form of tartar in the softened dentine, which becomes hard; and, moreover, a cavity in a tooth will contain, more or less continuously, saliva; and it is known that tartar is deposited in regions that are bathed continuously with alkaline saliva.

To summarise, I submit that:—

1. Caries occurs when the acids produced by the activity of bacteria are unneutralized, which is brought about by an insufficiency in quantity or in alkalinity of the secretions of the mouth.

2. An acid condition of the secretions of the mouth is *most* favourable to caries.

3. The chief and most constant factor in determining the acid, neutral or deficiently alkaline reaction of it, reaction of the secretion of the mouth, is prolonged gastric digestion, brought about by that improper dieting, etc., prevalent among the more highly civilised nations.

If this is the true pathology, it will have a practical bearing upon the treatment of dental caries. It is only necessary to point out that the treatment would be, not merely to fill carious teeth, but to take local and constitutional means to prevent its recurrence.

In conclusion, I take this opportunity to thank all who have so kindly placed at my disposal information that I should otherwise have been unable to obtain. Especially are my thanks due to Dr. Beddard, who has most considerately and courteously aided me with valuable suggestions and advice.

Since writing the above, my attention has been kindly drawn by Mr. Goadby to a paper—by Dr. Michaels, appearing in the Dental Cosmos, for December, 1900, p. 1293, on saliva—by which the reaction of the saliva is regarded as the chief determining cause of caries.

[8] Schäfer. Physiology. Vol. I., 1898, p. 343.

[9] Late Professor of the Royal Veterinary College.

Nursing News.

MATRON'S OFFICE.

The Nursing Staff have learnt with great satisfaction that the Governors have appointed as Matron of the Hospital, Miss Sarah A. Swift, the Lady Superintendent of the Guy's Private Nurses' Institution, and we wish her many years of happiness in her new work. Miss M. N. Oxford (Sister Miriam), who has been connected with the Hospital since 1886, holding the post of Sister in several wards has been appointed to succeed Miss Swift at the Institution. Though much regret has been expressed at her departure from the Hospital, we heartily congratulate her on her appointment, and wish her every success and happiness in her new work. Miss N. Strick (Sister Job), has been appointed Sister of the Clinical wards, and Miss Holman (Sister Cornelius) of Job Ward.

On January 12th. Nurse J. E. Hughes (Head Nurse in Dorcas), left the Hospital on completion of her three years' training, and Probationer Copley has been appointed to succeed her as Head Nurse in Dorcas ward.

On January 15th, Probationer Gibbins was appointed Head Nurse in John ward.

On January 19th, Nurse Drever, Head Nurse in Charity, left the Hospital to take up her duties at the Private Nurses' Institution, on completion of her three years' training, and Probationer Adams has been appointed to succeed her in Charity ward.

South African Memorial Fund.

(This Fund has for its object the erection of some permanent Memorial in the Hospital to those Guy's men who have fallen in South Africa.)

FOURTH LIST OF SUBSCRIBERS.

	£	s.	d.
Amount already acknowledged	98	8	6
George Turner, M.B.	10	0	0
Mr. Jacobson's Firm	1	10	0
Major H. St. G. Hore, R.A.M.C.	1	1	0
A. J. Cleveland, M.D.	1	1	0
R. P. Rowlands...	1	1	0
"E. T."	1	0	0
Owen W. Richards, M.A.	1	0	0
W. B. Secretan	0	5	0
W. L. Morgan	0	5	0
	£115	11	6

Guy's Hospital Medical School.

GORDON LECTURESHIP IN EXPERIMENTAL PATHOLOGY.

Applications are invited for this Lectureship, the dates of which will commence not later than October 1st, 1901. Applicants will be required to undertake not to engage in private medical practice during their tenure of the Lectureship.

Particulars of duties and of remuneration may be obtained from the Secretary to the Board of Electors of the Gordon Lectureship, Guy's Hospital, London Bridge, S.E., to whom applications must be addressed before March 9th, 1901.

Invalid Foods.

VIROL has been given a good trial in the wards and the results have been decidedly satisfactory. The patients take it well, and can assimilate it when they are unable to take other forms of nourishment. In one case, a child three years old, suffering from posterior basal meningitis, was unable to retain any form of food in the stomach—whey, albumen water, etc., and finally nutrient enemata were resorted to. The child rapidly lost flesh, the weight falling from 20¾lbs. to 15lbs. 2oz. in seven weeks. The child was then given Virol, other food preparations having failed, and in five weeks the weight rose again to 19lbs.

Virol is manufactured at the laboratories of Bovril, Limited, by Virol, Limited, 152, Old Street, London, E.C.

STANLEY COCK'S Cartoon of Mr. Clement Lucas, in four colours, now ready; price 6d. each. A few signed proofs left at 1s. Apply "Cartoon," The College, Guy's Hospital. No. 2 ready shortly.

Sport.

Association Football.

GUY'S v. THOMAS'.

INTER-HOSPITAL CUP TIE.

This match, which was played on Wednesday, January 16th, at Chiswick Park, resulted in a win for us by 5 goals to 1.

REMARKS.—Guy's lost the toss, and kicked off. The ball was at once taken into Thomas' half, and a few minutes after the start, a good shot by Barber, which was only partially cleared, enabled Chigwell to score our first goal. A little later Thomas' obtained a corner, but Norton and Wilson, on the left wing, cleared, and after a good run the ball found its way behind Thomas' posts. The ball now travelled up and down the field and we conceded a corner, but nothing resulted. Play now ruled in Thomas' half, and our opponents' custodian was twice called on to save. Barber then put in a clever run and a capital shot which found the corner of the net, the score being 2–0 versus Thomas'. Before half time Barber again scored, so that Guy's crossed over leading by 3–0. Soon after restarting Thomas' put the ball in our net, to the great joy of their supporters, but off-side had been given against them We quickly assumed the upper hand, and again play ruled in our opponents' territory, and their goal had several narrow escapes. Barber soon scored from a splendid cross shot at a difficult angle, and again a fifth goal was shortly registered by Norton receiving from Wilson. Play now became slack, and Thomas', taking advantage of this, scored their only goal, Collins having no chance of saving. Our opponents again came up, and all but scored, Collins having to concede a corner. We once more took the ball up the field, but, after one or two corners versus both teams, time was called, leaving us easy winners by 5–1.

All our men played well, and in the first half some very good play was seen in all three divisions. Barber forward, Cross at half, and Wilson at back, being, if possible, more noticeable at times, but, taken all round, each man was as good as his fellow.

Births.

MARSHALL.—On January 14th, at Oak House, Huddersfield, the wife of William Lawrence Wright Marshall, of a daughter.

PEDLEY.—On January 6th, at Peckham Road, Camberwell, S.E., the wife of S. Edward Pedley, M.R.C.S., L.R.C.P. Lond., L.D.S. Eng., of a son.

REYNOLDS.—On December 25th, at Silverhawe, College Park, N.W., the wife of B. Gore Reynolds, M.R.C.S., L.R.C.P. Lond., of a daughter.

TEBB.—On January 15th, at 226, Finchley Road, Hampstead, Bertha, the wife of Albert E. Tebb, M.D., B.S. Lond., M.R.C.S., D.P.H., &c., of a son.

ED.—L. E. S.

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Notice.

All Communications, Articles, Letters, Notices, and Books for Review, should be forwarded, accompanied by the name of the sender, to the Editor, GUY'S HOSPITAL GAZETTE, *Guy's Hospital, S.E.*

Any of our Subscribers who may be desirous of having their numbers of the GAZETTE *bound should leave them with the Librarian.*

The annual Subscription to the GAZETTE *is* 6s. 6d.; *post free,* 7s. 6d. *All financial communications, as well as subscriptions, should be sent to the Financial Editor,* Mr. C. H. WELLS, SECRETARY'S OFFICE, GUY'S HOSPITAL.

The charge for binding in blue, with the Arms of the Hospital in gold, will be ONE SHILLING AND SIXPENCE.

Calendar of Coming Events.

February, 1901.

Sat. 2.—Funeral of Her late Majesty Queen Victoria. Medical School Office closed.
Messrs. Jacobson and Fripp's take-in; Drs., P. H. P. Odgers and F. H. Parker; Cl., F. Curtis.

Mon. 4.—1.15 p.m., Clinical lecture by Dr. Galabin.

Wed. 6.—1.30 p.m., Clinical lecture by Mr. Golding-Bird.

Thur. 7.—Messrs. Howse and Symonds' take-in; Drs., H. J. Gater and G. Moir; Cl., P. T. Manson.

Fri. 8.—Meeting of the Dental Society at 4 p.m.

Sat. 9.—1 p.m., Clinical lecture by Dr. Fawcett.
G.H.R.F.C., I., Kensington, away.
II., Kensington, home.
III., Polytechnic "A," away.
IV., Dulwich College III., away.
G.H.A.F.C. I., Idlers, away.
II., Croydon Park 2nd XI., home.

Mon. 11.—1.15 p.m., Clinical lecture by Mr. Brailey.

Wed. 13.—1.30 p.m., Clinical lecture by Mr. Jacobson.
G.H.R.F.C. II., Merchant Taylors' School, home.

Thur. 14.—Messrs. Lucas and Lane's take-in; Drs., A. J. Beadel and A. C. Osburn; Cl., F. G. Gibson.

Sat. 16.—1 p.m., Clinical lecture by Dr. Taylor.
8 p.m., Meeting of the Physical Society.
G.H.R.F.C., I., Lennox, home.
II., Lennox, away.
IV., Old Alleynians III., away.
G.H.A.F.C. I., Reigate Priory, away.
II., Kenley (reserves), home.

Guy's Hospital Gazette,

FEBRUARY 2, 1901.

Artificial Feeding of Infants.

CLINICAL LECTURE BY DR. NEWTON PITT.

October 13th, 1900.

GENTLEMEN,—In continuation of the subject of the feeding of infants, which we discussed last week, I propose to-day to consider what foods are suitable, and what are the principles which must be satisfied, when it has been necessary, for some reason or other, to wean them from the breast.

Of recent years a large amount of literature has been published on the question, and as the result of the investigations of various observers, many methods of carrying out the requisite conditions have been devised.

Errors in the dieting of healthy infants are generally due to ignorance, carelessness, or difficulty on the score of expense. Difficulties also often arise in feeding an infant as the result of illness, or of individual peculiarities, and in such a case, food which is suitable for most children, may fail to be assimilated, and a variation may be necessary.

The most convenient substitute for human milk is the milk of the cow, but the different proportion of its several constituents, necessitates that it should be modified before it is administered. It has been found by experience that hardly any mixture made to simulate human milk, will suffice to keep an infant in health unless some form of milk is one of the main constituents. Asses' milk approximates more nearly to human than does that of the cow, but it is expensive, and only to be obtained with difficulty. Goat's milk is not in general use, but it is often invaluable for people who may be able to keep a goat, yet may be unable to ensure a good supply of pure cow's milk.

As a child grows, its power of assimilation varies. The following table by Dr. Holt gives an indication of the variations, and the amount of milk that a healthy infant should take. The intervals, and the amount in each feed may require to be diminished if the child is feeble; while if it does not remain satisfied until the time of the next feed, the quantity may be increased. If it is vigorous, the amount of proteid may be increased 50 per cent.

Age, in months.	Proteid, per cent.	Fat, per cent.	C rb, per cent.	Qnty. oz.	Interval, hrs.	No.	Total, ozs.
1	1	2	6	2	2	10	20
2	1·25	3·5	6·5	3	2	8	24
3	1·25	3·5	6·5	3¾	3	7	26
4	1·5	3·75	6·5	4½	4	6	27
6	1·75	4	7	6	4	5	30
8	2	4	7	7	4	5	35

Diluted cow's milk.—Cow's milk is much more difficult to digest than human, mainly on account of the form in which the proteid is present. It consists mostly of casein, which forms a hard, tough coagulum, while in human milk it is chiefly lactalbumen which forms a much more floccu ent clot. If acetic acid be added to cow's milk, a dense firm curd is formed; while the addition of the acid to human milk, only produces a flocculent precipitate.

If the cow's milk be diluted, it is not until the dilution reaches one in five that the precipitate produced by acetic acid is similar to that with human milk. Such dilution would only contain 8 per cent. of proteid. For a long time it was disputed whether it were better to dilute with water, barley water, lime water or malted food and water; but the density of the precipitate does not vary much when the same proportions are used. The amount of lime in lime water is only half a grain to the ounce, which is less than that already present in combination in milk. The advantage of the lime water is that it is sufficient to neutralise the acidity of milk as supplied in towns. The milk of cows turned out into the open and fed on grass is alkaline when drawn, but that of cows fed on straw and dry food is acid, and the same change tends to take place in milk which is kept.

The first lesson, therefore, to be learnt is that in imitating human milk by using cow's milk, the proportion of proteid must be kept rather lower, and especially when the change is first made.

As to the methods of producing the required mixtures, they can now be purchased ready prepared. The Aylesbury Dairy, Welford's, and other large dairies sell milk which has been modified so as to reduce the proportions to that required by infants, and which they send out ready sterilised in bottles, which will keep good for a long time. It is expensive, the proportions are fixed, and there is too much proteid (1·3 per cent.), even in the No. 1 form, to suit some infants, while the milk is no longer antiscorbutic. Still it is wholesome and sound, but where there is a difficulty in preparing mixtures accurately, it is simply invaluable. The enormous quantities that are sold show that it meets a want. It costs from 7s. to 10s. a week to feed a baby in this manner, which to many families is prohibitive.

A Walker-Gordon laboratory similar to those which flourish in the United States has recently been established in London. They will send out sterilised milk in bottles each ready for one feed, according to any formula, varying the constituents as desired. This in infants seriously ill may be of the greatest value, but it costs 15s. a week.

An average cow's milk consists of proteid 4 per cent., fat 3·5 per cent., and sugar 4·3 per cent.

An average human milk consists of proteid 1·5 per cent., fat 4 per cent., and sugar 7 per cent.

If the milk is merely diluted, it would be deficient both in fat and sugar and will require, therefore, further additions.

Many methods of modifying the milk at home have been recommended by various writers. I may indicate some of the more important.

It is desirable always to Pasteurize the milk for children.

1. The milk may be diluted with one or more parts of the above liquids, according to the amount of the proteid required. The deficiency of fat is made up by adding cream ($\frac{1}{18}$ part of the water added, if centrifugalized, cream is used) and for each eight ounces two level teaspoonfuls of either milk sugar, cane sugar, or a malted food such as Mellin's or Savory & Moore's.

Of these cane sugar is the cheapest, but the mixture quickly ferments and sometimes disagrees. Milk sugar costs 1s. 6d. per lb. and the mixture quickly goes sour.

Mellin's food, which consists of 82 per cent. of soluble carbohydrates, is readily absorbed and answers admirably, but is more expensive.

(Centrifugalized cream as supplied in London contains about 45 per cent. of fat.

Milk, after standing four hours, yields one-fourth of its volume of 8 per cent. cream; after six hours, one-sixth of its volume of 12 per cent. cream; and after twelve hours, one-eighth of its volume of 16 per cent. cream. If the latter be used the proportion to be added will be one-sixth of the fluid which has been added to the milk).

Any required mixture, according to the table of Dr. Holt, given above, can readily be made up, and with a vigorous child the amount of proteid may be half as much again.

The difficulty with poor patients is to devise a mixture which is inexpensive. The fat can be best supplied by melting in the milk a piece

of margarine or butter (82 per cent. of fat) of the required size; and the sugar by the addition of cane sugar.

2. Another simple method of preparing the mixture is to stand a quart of milk in a wide-mouthed bottle in a cool place for six hours, and with a syphon decant off the lower two-thirds of the milk, which will only contain 1 per cent. of fat, and will leave in the jar a cream containing 10 per cent., but the same proportion of sugar and proteid as before. By using these two fluids and water, any required formula can be made up, by adding the required amount of sugar.

3. A third method is to take a pint of milk and remove the cream, by skimming after standing or by centrifugalizing. Remove the curd from half a pint of this milk by the use of rennet. If the two half pints, of whey and of milk, be mixed with the cream, the fluid will contain 2 per cent. proteid, 3 per cent. cream and 4 per cent. sugar. Water can be added if it is desired to further dilute it, and the necessary amount of sugar and cream added.

This is the most economical method, and costs about 1s. 6d. to 2s. 6d. per week. It is the method employed by the large dairies to prepare humanized milk.

Before proceeding to discuss other substitutes for human milk, it will be desirable to put before you the conditions which general experience has shown must be complied with, and which can all be satisfied by a diet of modified cow's milk.

A failure to feed an infant satisfactorily will, on examination, be found to be almost invariably due to neglect of one of the following rules.

1. Its constituents must bear a certain proportion to one another, varying with its age.
2. The total amount of each constituent daily must be sufficient for the needs of the organism.
3. It must contain an antiscorbutic element.
4. It must contain a large proportion of animal matter.
5. It must be presented in a readily digestible form.
6. The food must be fresh, sound and free from pathogenic infection.
7. It must be administered with regularity, lukewarm as a rule, at suitable intervals, and changes in diet should only be made gradually.
8. The cost should be reasonable.
9. Scrupulous cleanliness of the feeding bottle and utensils.

1. The relative proportions of the constituents suitable for the varying ages have been indicated in the table given on p. 46. The fat is the constituent which is most frequently deficient in artificial foods for infants, especially among the poor. This deficiency is a frequent cause of constipation. Cream, butter, or the yolk of egg, which contains 20 per cent. of fat, are the most convenient modes of supplying the deficiency. Many infants at first are unable to assimilate a fluid containing more than 2 per cent. of fat, and when some food is constantly regurgitated, it is probably necessary to reduce the amount of fat. An excess of proteid tends to induce colic and not infrequently vomiting.

2. If the total amount of any constituent administered daily at the ages stated below falls below that indicated, it may be the reason why a child fails to flourish and steadily put on weight, and the defect should at once be rectified by a suitable addition.

Age.	Proteid.	Fat.	Sugar.
1 month	·3 oz.	·4 oz.	1·2 oz.
6 "	·8 oz.	1·2 oz.	2·1 oz.
8 "	1·0 oz.	1·4 oz.	3·2 oz.

3. The third condition is that the diet should contain some antiscorbutic. Fresh milk contains something which enables it to act as an antiscorbutic, even when it has been Pasteurised, but which is destroyed by boiling it for the hour or more which is necessary in order to completely sterilize it, and is also wanting in every dessicated food. If you feed children entirely on sterilised or desiccated food, you invariably find, after five or six months, that they tend to develope scurvy rickets. Scurvy rickets used to be a comparatively rare disease, but with the large number of desiccated foods at present in the market it is now not infrequent. The more carefully a child is fed on such foods the more certainly will it develope scurvy rickets. I may refer to two children, who were in each case, the only children of rich parents, and who had every possible attention. Their parents and doctors were absolutely certain that no particle of unsterilised food had ever entered their mouths; and the greater the precautions the parents took, the more certain were the children to suffer from scurvy rickets. These children had hæmorrhages under their skin and round the joints under the periosteum. They lay absolutely helpless from pain, and were most profoundly anæmic. They had been fed on a well-known food, prepared according to the printed instructions, without any fresh milk, and, therefore, without any antiscorbutic. You

must add, therefore, from time to time, to a sterilised food, if you decide to use one, either a little mashed potato—which is undesirable during the first few months of life on account of the starch that it contains — meat-juice, cream, or some egg albumen, or a little orange-juice may be given occasionally; in order to obviate the danger of inducing scurvy rickets.

4. When children are fed upon farinaceous food and their diet is deficient in animal constituents, they rapidly become flabby, anæmic, and fail in health.

5. Infants are unable to digest farinaceous foods before the age of seven months, and for some time after that age they are only capable of digesting a small amount. Ordinary articles of diet with which parents are so fond of regaling their children at even the earliest age are absolutely unsuitable, because they cannot be digested till much later. Cow's milk contains too much proteid, and must be properly diluted before it is suitable.

6. Cow's milk has been shown to be a not infrequent means of conveying infection. Tuberculosis from cows with tuberculous udders; diphtheria, scarlet fever, and typhoid epidemics have been traced to it. In the summer, epidemic diarrhœa is often due to milk which has undergone changes and been infected. There is no doubt, in large towns where many cans of milk are mixed together, that one infected can will contaminate an enormous amount of milk. It is most important that something be done to obviate this, and it is found that if the milk is warmed to about 170° Fahr. for twenty minutes, you kill all the pathogenic organisms, although you do not make the milk sufficiently sterile to keep indefinitely. But it is sufficient to prevent infection. One of the most convenient methods is by an Aymard's sterilizer, in which an inner saucepan containing the milk is put into an outer containing water, which is then brought to the boil and kept at it for a quarter of an hour. In that time, although the milk in the inner saucepan is heated up to 170° Fahr. it does not reach the boiling point and its flavour is unchanged. The alteration in taste which many object to, takes place at a higher temperature. Therefore, what is generally recommended, is, that the milk should be simply Pasteurised, as it is called, without actually being boiled. But even if it is boiled for a minute or more, it does not lose its antiscorbutic properties. Such milk will not keep more than two days, and therefore dairies which send out milk in bottle, which has to remain good for many days, are obliged to keep it for over half an hour at or above boiling temperature; and in the process some unknown change takes place which destroys the antiscorbutic properties of the milk.

7. It is essential that the meals should be at regular intervals, as children readily drop into uniform ways, and are unable to digest satisfactorily when the times are irregular. There is also no more potent cause of maldigestion than the custom of giving a child food whenever it cries, in order to keep it quiet, and if a child is fed very frequently digestion is sure to be feeble, as the stomach does not have sufficient time to rest and prepare for the next meal.

SOME FOODS OTHER THAN DILUTED MILK.

1. *Peptonised milk.*—This can be readily prepared by Fairchild's peptogenic powders, and is most useful for a short time in cases where a child fails for any reason to digest cow's milk satisfactorily, but for a continued use it is unsatisfactory. If a litter of puppies be fed, half on diluted cow's milk, and half on peptonised milk, the latter lot soon fall behind the others in weight.

2. *Whey.*—This can be prepared with rennet, and if a tablespoonful of cream be added to each eight ounces, it is a suitable food for very young infants, or for children with acute gastro-intestinal disturbances; after a time some milk may be added. For the latter, also white wine whey (prepared by adding a wineglass of sherry to half a pint of hot milk, boiling and straining) is of great value.

3. *Condensed milk.*—All condensed, separated, milks form but starvation diet for infants, and should be absolutely forbidden. Good condensed milk diluted 1 in 6 up to 1 in 12, is easily digested, but it is woefully deficient in fat, is not antiscorbutic, and tends ultimately to produce a fat, pale, flabby, rickety child. Its value is for a journey or a sea voyage; in the summer when cow's milk in town readily goes wrong; or during an acute failure to digest fresh milk. Its use should never be continued beyond a few weeks. It is not appreciably more economical than diluted cow's milk.

The defect of all the following prepared foods is that they tend to be deficient in fat, and to have an excess of carbohydrates.

4. *Prepared foods to which water is to be added:*— Horlich's malted milk, Allenbury's food, Nestle's milk food. These are very useful on an emergency, but fail to contribute any antiscorbutic element, and cannot therefore be recommended for prolonged use Their defects may be diminished by the addition from time to time of yolk of egg, fresh cream, meat-juice, etc.

5. *Cow's milk, to which is added malted farinaceous food, in which no starch persists :*—Mellin's food, one of the best of the artificial foods. It is more quickly and readily prepared than those in the next group. It requires the addition of cream, and like all these artificial foods, is not inexpensive.

6. *Milk, to which is added a prepared food which is only completely malted by the process of mixing, and which then requires to be boiled,* Savory & Moores' food, Benger's food. These foods as well as Mellin's, when added in the proportion of about 5 per cent. to diluted milk, practically form a substitute for the deficient sugar. Children often thrive on them.

7. *Farinaceous foods in which starch is still present :*—Ridge's and Neave's food, Robinson's barley, arrowroot, cornflour, etc. Even when mixed with milk they are unsuitable until after the age of seven months, and should only be given with discretion then ; but they are afterwards digested without difficulty. Their continued use from an early period generally leads to rickets.

8. *Meat-juice.*—Certain foods are deficient in the quantity of animal matter that they contain, and occasionally, also, when a child is only able to take whey, the proportion of proteid matter is insufficient, and may be supplemented by the addition of meat-juice. It is also of great value in cases of severe diarrhœa. Meat-juice may be prepared by mincing one quarter of a pound of lean meat, to which is added an ounce of water. Allow it to stand two or three hours and squeeze it through muslin ; a child may have half an ounce to six drachms of the juice during the day, it must be freshly prepared each twelve or twenty-four hours. In some cases where there is great difficulty in taking milk, the child may continue with meat-juice added to whey or water for some considerable time, but, as a rule, the value of meat-juice is for emergencies and for temporary use. Sometimes it is necessary to feed children on *meat-pulp,* which may be prepared by scraping the meat and then rubbing the pulp through a sieve. A small spoonful of the soft, scraped meat, may be given at one time.

When children are taking-meat juice or pulp, their motions become exceedingly foul and offensive, and you must not assume that this is an indication that much decomposition is going on. The cases in which these are generally administered, are those in which the motions are foul and fermenting, you might at first be inclined to think that the meat-juice or pulp is increasing the fermentation. There is always a foul smell where these substances are taken, and it must be accepted as a natural result. Meat-pulp and water, in cases of severe gastro-intestinal disturbance, will keep a child alive for some time where milk cannot be taken.

Most of the meat-juices and extracts on the market contain, in spite of their testimonials, but a trace of nourishment, and the cost of many of them in proportion to their value ought to prohibit their use, but unfortunately does not.

The chief troubles which result from errors in diet in infants are colic, constipation, diarrhœa, and vomiting, failure to put on weight, a tendency to become anæmic and rickety, and finally infantile scurvy.

Colic.—A common cause of colic is an excess of proteid in the food, which must be reduced ; but in many cases the colic is not directly due to an error in diet, but to a chill. If children are exposed for a long time undressed, or are sent out in a cold wind without being properly kept warm, they are very apt to develop gastro-intestinal disturbance. Many cases of colic are due to exposure of the skin to a chill.

When colic is at all severe, the first thing necessary, is to diminish the amount of food and give a dose of castor oil. You can give either a teaspoonful of castor oil or about 15 minims of castor oil made into an emulsion, with some tragacanth, and repeat it two or three times. Or an enema of glycerine may be given to empty out the rectum where, in many cases, you will find a mass of undigested clotted milk. The temperature is often very high and the stupor may be alarming.

When the colic is severe and the child becomes collapsed, hot applications to the abdomen, or a hot bath, and a few drops of brandy by the mouth may be necessary. But the first thing is to empty out the bowel and then to pay attention to the diet in order to prevent the colic from recurring.

Constipation in children arises in most cases from a deficiency in the supply of fat, or from an excess of proteids, and on examining the motions of small babies, when the fat has been deficient, the motions will be whiter than normal. The normal mustard-colour motion is generally one which contains a sufficient amount of fat, but white, chalky, or clay-like motions are those in which fats are deficient. Constipation can often be relieved by the addition of a teaspoonful of fluid magnesia to some of the bottles, or if the child is older, the addition of a little oatmeal to the bottle will improve the motions. Malt is another medicine you may

give, also malted foods may keep the bowels regular when they were not so before. In fact, one of the defects of some of the malted foods, in the case of many children, is the tendency to diarrhœa and relaxed motions which result.

Diarrhœa.—This is almost invariably due to an unsuitable food or exposure of the skin, and in treating this ailment the rule is, first of all, empty out the bowel with castor oil, and if the diarrhœa is at all severe, feed the child on the white of an egg and water. This is made by mixing up the white of one egg with half a pint of water, and straining through muslin. Keep the child on this only for twenty-four hours, and you may also give some veal broth until it is better. A dose of castor oil and stopping the ordinary food will, if applied early, generally stop diarrhœa, but if anything more be requisite; an aromatic mixture such as a little aromatic spirits of ammonia, with some tincture of cardamoms and dill water, is far more suitable than any astringent mixture. In acute diarrhœa do not give any astringent. This is useful only when the diarrhœa is chronic. Acute diarrhœa is to be treated by an aromatic, by emptying the bowel, and by starvation, practically speaking, but do not deprive the child of water. There is no objection to keeping on with the white of an egg and water for two or three days, if necessary. But as soon as milk is again given, remember you must commence with a very small amount of proteid. If you attempt to give the full amount the child will probably be upset, but if you give a small amount and gradually increase it, the child will probably digest it, although it may remain hungry.

Vomiting.—If the amount of a feed is too large, the child is very apt to be sick. If this is constantly the case you must diminish the amount. In cases where the fat is excessive a spoonful or two are regurgitated without effort, and will cease when this is diminished. Minute dose of calomel, one-sixth of a grain repeated every two or three hours, is a very efficient remedy where there is diarrhœa associated with the vomiting. Where there is no diarrhœa, very often half a minim of the tincture of iodine in a teaspoonful of water will be sufficient to check the vomiting.

In cases where there is a tendency for scurvy-rickets to develop, a disease in which the child becomes extremely tender and anæmic, and the joints and long bones enlarged on account of the sub-periosteal hæmorrhages which occur, you must see that the child at once has a fair amount of fresh food; meat-juice is probably the most suitable form in which to administer it. Give the child meat-juice in each bottle, and a small amount of mashed potato, say a dessert-spoonful with three bottles in the day, and this will generally, within a fortnight, produce a very marked improvement. This affection invariably is due to all the food having been sterilised, or else to its consisting entirely of farinaceous food without any milk; the remedy is sufficiently obvious.

Nine out of ten cases of rickets are undoubtedly due to defective food, and the defect in the food which is most common in rickets is the fat; the reason being that it is most expensive, and therefore, with poor people, is the one element which is most difficult to supply. There is no doubt that a great deal can be done by keeping the children out in the fresh air and giving them iron and cod liver oil, but bear in mind that the first thing to consider in the treatment of rickets, is not the medicine, but the revision of the diet.

Hospital News.

CLASSIFIED LIST OF CASES.

In the Medical Wards.

CASES UNDER DR. TAYLOR.

MARY	38.	Typhoid.
	39.	Phthisis. Mitral regurgitation.
	40.	Typhoid. Peripheral neuritis.
	41.	Gastric ulcer.
	42.	Enlarged glands in neck. ? Hodgkin's disease.
	44.	Gastric ulcer. Hæmatemesis.
	45.	Tuberculous kidney. Nephrectomy.
	47.	Acute rheumatism. Sixth attack. Mitral regurgitation.
	48.	Appendicitis.
	49.	Emaciation and pyrexia.
	Cot 56.	Broncho-pneumonia.
	57.	Pleuritic effusion. Abdominal abscess. Incision.
PHILIP	23.	Acute Bright's disease.
	25.	Acute Bright's disease.
	27.	Typhoid. Relapse.
	28.	Mitral stenosis and regurgitation. Chronic peritonitis. Ascites.
	29.	Mitral stenosis and regurgitation.
	30.	Chorea.
	32.	? Hepatic abscess.
	33.	Fibroid lung. Thickened pleura.
	34.	Pleuritic effusion.
	35.	Subacute tubal nephritis.

PHILIP 36. Rheumatism.
37. Fractured ribs. Pneumonia.
38. Abdominal abscess. Incision.
39. Stridor. Tracheal obstruction. Aortic aneurysm.

CASES UNDER DR. HALE WHITE.

MARY 13. Typhoid.
14. Abdominal tumour. Sarcoma. ? Stomach. ? Adrenal.
15. Mitral regurgitation. Enlarged liver.
16. Cerebral tumour. Trephining.
17. Acute rheumatism. Pericarditis.
18. Hæmoptysis. Mitral regurgitation.
19. Typhoid.
20. Abdominal tumour. ? Kidney.
21. Hæmatemesis. Gastric ulcer.
22. Carcinoma of cervix. Secondary deposit in spinal cord. Cystitis.
23. Peliosis rheumatica.
24. Diabetes mellitus. Typhoid.

PHILIP 1. Acute nephritis.
2. Mitral stenosis and regurgitation. Enlarged liver.
3. Typhoid. Right lobar pneumonia.
4. Mitral stenosis and regurgitation.
5. Chronic interstitial nephritis. Acute tubal nephritis.
6. ? Anterior poliomyelitis. ? Mitral stenosis. Embolism.
7. Typhoid.
8. Mitral regurgitation. Enlarged liver. Ascites. Œdema.
9. Right hemiplegia. Albuminuria.
10. Phthisis. Tuberculous laryngitis.
11. Old infantile paralysis. Talipes.
12. Broncho-pneumonia.
14. Carcinoma of pancreas. Secondary deposit in liver. Jaundice.
15. ? Growth of kidney.
16. Aortic stenosis and regurgitation. Mitral stenosis and regurgitation.
17. Growth of œsophagus.
18. Mitral regurgitation. Paralysis of right arm.
19. ? Cirrhosis of liver.
20. Acute rheumatism. Mitral regurgitation.

CASES UNDER DR. PERRY.

MARY 1. Phthisis.
2. Mitral disease. Pleuritic effusion.
5. Chlorosis.
6. ? Neurosis.
7. Enlargement of spleen. Mitral disease.
8. Eczema.
Cot 52. ? Meningitis.

STEPHEN 3. Chorea.
4. Rheumatism. Mitral and aortic disease.
5. Enteric.
6. Mitral and aortic disease.
7. Pyuria. ? Appendicitis.
8. Enteric.
9. Bronchitis. Glycosuria. Albuminuria
10. Mitral and aortic disease.
11. Diarrhœa. Phthisis.
13. Bronchitis.
14.
15. ? Empyema. ? Growth of lung.
16. Œdema of feet.
17. Aortic disease.
18. Empyema.

CASES UNDER DR. PITT.

MARY 25. Carcinoma of cæcum. Operation.
26. Jaundice.
27. Growth of lung.
28. Bright's disease. Mitral regurgitation.
29. Tuberculous peritonitis.
30. Epistaxis.
31. Chorea.
32. Pleuritic effusion.
33. ? Dyspepsia.
34. Infantile spastic hemiplegia.
35. Chlorosis.
36. Empyema.
37. Acute rheumatism. Aortic regurgitation.
Cot. Broncho-pneumonia. Basal meningitis.

STEPHEN 21. Laryngitis. Phthisis.
22. Intestinal obstruction. Operation.
23. Acute rheumatism. Endocarditis.
24. Pleuritic effusion.
25. Obstruction to left bronchus.
27. Sciatica.
28. Tumour of corpora quadrigemina.
29. Phthisis.
30. Diabetes mellitus.
31. Asthma.
32. Angina pectoris.
34. Phthisis.
36. Pleurisy.
37. Friedrich's ataxia.
39. ? Meningitis.
40. Multiple melanotic sarcomata.
Cot. Starvation.

In the Surgical Wards.

CASES UNDER MR. HOWSE.

LYDIA 4. Lupus of nose.

JOB 4. Appendicitis.
7. Varicose veins.
9. Secondary epithelioma of cervical glands.
11. Gunshot wound. Ulnar paralysis.

Cases under Mr. Lucas.

Lazarus	8.	Epithelioma of lip.
	10.	Œsophageal obstruction.
Martha	7.	Hammer toes.
	8.	Varicose veins.
	9.	Cleft palate and hare-lip.

Cases under Mr. Golding-Bird.

Cornelius	1.	Fractured tibia and fibula.
	5.	Fractured femur.
	13.	T-fracture into knee-joint.
	14.	Bruised abdomen and penis.
Luke	3.	Appendicitis.
	8.	Old traumatic stricture of urethra.
	9.	Epithelioma of tongue.
	17.	Needle in knee-joint. Extracted.
Charity	1.	Gonorrhœal arthritis of ankle.
	2.	Scirrhus of breast.
	10.	Fractured base of skull. Abortion.
	13.	Strangulated umbilical hernia. Kelotomy (since dead).

Cases under Mr. Jacobson.

Naaman	5.	Fæcal fistula. Old appendicectomy.
	9.	? Displaced similunar cartilage.
Dorcas	2.	Bilateral tuberculous disease of knee-joint.
	5.	Old tuberculous tarsus. Painful stump.
	8.	Chronic mastitis. ? Sarcoma.
	Cot B.	Cleft palate.

Cases under Mr. Symonds.

Job	18.	Tumour of maxillary antrum.
Lydia	19.	Sinus after nephrolithotomy.
	21.	Frontal sinus disease.

Cases under Mr. Lane.

Lazarus.	1.	Appendicitis.
Martha	13.	Tuberculous tarsus.
	Cot C.	Cleft palate and hare-lip.
Samaritan	12.	Whitlow. Cellulitis of hand.

Cases under Mr. Dunn.

Luke	—.	Funicular hernia.
Charity	21.	Sinus after nephrolithotomy.
	22.	Varicose veins.

Cases under Mr. Fripp.

Naaman	22.	Epithelioma of tongue.
Dorcas	20.	Ganglion of wrist.
	22.	Biliary calculus.
	Cot D.	Enlarged liver, spleen, and glands.

Chapel News.

An Address will be given by Canon Newbolt in the Chapel on Thursday, February 14th, at 12.30 p.m.

Delirium Tremens complicated by Hæmatemesis.

The following case presented some difficulties in treatment, and I publish it in the hope of eliciting both criticism and suggestions.

W. G. E., æt. 33, a publican and proprietor of a large hotel in this neighbourhood, was taken ill with vomiting of blood on the morning of Monday, December 3rd.

Previous history.—The patient came to this district some two years ago, and had commenced business as a publican. He had previously had an attack of delirium, (cause not known).

He first came under my notice in May of last year, when I attended him in a definite attack of alcoholic delirium tremens, due to whisky soaking.

In that attack there were no special difficulties in treatment; he was easily restrained, took freely of fluid food, and after three days and nights of delirium tremor and insomnia, fell asleep and woke up convalescent.

That attack, however, impressed me with the conviction that all the drugs which I gave with the view of procuring sleep had been quite futile. These drugs, which I gave in succession and with due caution during three days and nights, were—(*a*) I.M.H. gr. $\frac{1}{4}$; (*b*) I.M.H. gr. $\frac{1}{3}$; (*c*) Chlor. Hydr. gr. xv. with Pot. Brom. gr. xx. 4tis horis; (*d*) Trional gr. xx.; (*e*) Inj. of Hydrobromate of Hyoscyne gr. $\frac{1}{200}$; (*f*) Inj. of Hydrobromate of Hyoscyne gr. $\frac{1}{100}$.

The sleep, which came eventually, was due, I thought, not to the drugs, but to the fact that his attack had played itself out.

The patient was sobered somewhat by this attack, and refrained from drinking for some few weeks. He then commenced again, at first secretly, his usual practice being to get up at 6 a.m. and visit his cellars, and then excessively and more openly, confining himself almost entirely to whisky.

I happened, from time to time, to be attending other people in the house, and therefore had opportunities of seeing the patient sometimes. Latterly he avoided me, but from occasional views which I had of him, and of his tremulous condition and jerky movements, I felt sure it would not be long before I was wanted.

Present attack.—He was seized with vomiting of blood early on Monday, December 3rd. He had vomited three times in quick succession, and on each occasion had brought up some 3–6 oz. of dark blood. He had also had five actions of the bowels, but the motions had not been observed or saved.

When I saw him he was lying on his back in bed. His attitude was tremulous, restless and fidgetty, and every voluntary movement was jerky and spasmodic. He would have momentary illusions, see an imaginary cobweb, or shout out an order to a supposed waiter, but he was generally awake to his surroundings, and would answer questions rationally and to the point.

The tongue was large, furred on its dorsum, moist and tremulous. He had eaten very little, I was told, for some days. The abdomen looked quite natural, and moved freely with respiration; there was general hyperæsthesia, but no special tenderness. I could feel the edge of the left lobe of the liver, but could not say that the liver was enlarged.

There is little to say about his other organs. The skin was bathed in sweat; temperature 98° F.; pulse 80, soft and regular. There was no displacement of the cardiac impulse, and the sounds were clear; the lungs were normal, and the urine previously tested had been free from albumen.

The diagnosis was delirium tremens with hæmatemesis. I thought the bleeding probably came from a ruptured engorged vein at the lower end of the œsophagus, and that the engorgement was due to portal obstruction. It was quite likely that the patient had early cirrhosis, but beyond a distaste for his breakfast and some occasional bleeding from piles, there had been no symptoms of that disorder. The treatment advised was that he should be kept in bed, with his wife and the attendant continually at his side, that his excessive movements should, as far as possible, be kept in check by coaxing and gentle restraint, and that he should have for diet five ounces of iced milk every hour. He was given an effervescing mixture containing Pot. Brom. gr. xv. and Acid Hydrocyan. Dil. ɱ. iv. every four hours. I saw him again in the evening of that, the first day of his illness. He had vomited blood again three or four times, bringing up a few ounces on each occasion; the bowels also had acted once, and the motion, which was saved, contained altered blood. He had had no sleep, but had taken his milk freely, and I thought the delirium was not quite so marked, and attributed the improvement in this respect to the blood-letting. The pulse, too, was 80, and of good character.

The feeding was continued, and a mixture containing Bism. Carb. and Pot. Brom. āā. gr. xv. was substituted for that of the morning.

December 5th, second day of illness.—There had been no further vomiting or bowel action, and he had taken his milk freely. There had been no sleep. Tremor, excitement and illusions are more marked; there is occasional muttering. The whole muscular system is in a state of vibration; the hands and fingers shake violently as he plucks at imaginary cigarette ends from his counterpane; the tongue trembles when he protrudes it. When he turns on his side he does so with a sudden jerk; he has illusions that he is out driving, and that his horse is backing into a wall, or that he is slipping off his bed, or that people have knocked a hole in the wall of his bedroom and are staring at him. Now and then he is seized with an irresistible desire to get out of bed, or shouts out to supposed bystanders.

With all this, however, there was no great difficulty in reassuring him and coaxing him to keep in bed, and he would answer appositely to questions. His pulse continued at 80.

The bismuth was omitted, and Mag. Sulph. gr. xl., sing. dosilus, with Tr. Card. Co., and Aq. Menth. Pip. was added to his bromide.

December 6th, third day of illness.—11 a.m.—The condition was practically unchanged: insomnia and delirium continued. He was taking his food well; there had been no return of vomiting and the bowels had acted. An egg was added to his milk every four hours.

6 p.m.—There was still no change; his pulse continued at a uniform rate of 80, and an examination of his heart gave no warning of a collapse.

10 p.m.—I was called hurriedly to the patient, who was thought to be dying. The account was that he had had his last feed of milk and egg at 7 p.m., and that he had continued in much the same condition as that in which I had seen him at 6 o'clock, until 9.30. He was then seized with a kind of fit, in which he was strongly convulsed, lost consciousness, and fell back on his pillow, as was thought, lifeless. On my arrival, the face was pale and drawn, the lips blue, the skin sweating; there was no consciousness; general tremor continued; the eyes were open and in ceaseless movement, the pupils dilated; respiration was shallow and hurried, and the radial pulse almost imperceptible and quite uncountable.

He seemed to me to have had an epileptiform seizure, with consequent cardiac collapse. I gave him I.M.H. gr. ¼, and ordered hot coffee for rectal injection; three or four ounces of egg and brandy mixture were put to his mouth, which he reflexly swallowed. In the course of the next half hour a series of epileptiform convulsions followed, and the face assumed an aspect of extreme terror; the pulse then gradually became slower, and in a moment the neck fell limp and all movement ceased, the patient being dead about one hour after my arrival, and about two hours after the first warning of any cardiac collapse.

The reflections suggested by the above case seem to me as follows:—

The ever-present fear in an attack of delirium tremens is that of cardiac failure. Two factors conduce to this—firstly, the deterioration of the heart muscle brought about by a saturation of the system with the alcoholic poison, and secondly, the exhausting effects of the ceaseless muscular activity and general unrest of the whole nervous system.

The efforts of treatment should be directed to sustaining the heart in the ordeal through which it has to pass, and this is best effected by keeping the body at rest, as far as it is possible to do so, by persistent but patient and gentle restraint of movements, and by suitable feeding.

Two classes of drugs may also be employed—the one class administered with the object of directly supporting and stimulating the heart, and the other class with the object of quieting the nervous system, and if possible of inducing sleep, and so indirectly saving the heart.

The only point about which there can be two opinions is the question of drugs. As regards the first class, should drugs such as strychnia, digitalis, ether, ammonia and brandy be given early, and even when there are no warning signs of cardiac exhaustion, and do they entail no disadvantages when so given, or should they be reserved until indications of heart failure present themselves, and then may it not be too late? As regards the second class, do they really bring about the result for which they are given? If they do produce any such effect, is that not more than outbalanced by their depressing action on the heart, which is already the greatest source of anxiety?

In my case, as I have said, there was no special difficulty in managing or restraining the patient, even without undue force. The occurrence of hæmatemesis on the first day of the attack of delirium tremens naturally raised the question whether one should regard the bleeding or the delirium of primary importance, the treatment of each being, in a measure, antagonistic to the other.

It seemed to me nearly certain that the blood must come either from an œsophageal pile or from a congested gastric mucous membrane, and assuming this, I believed the bleeding was less likely to be aggravated by judicious feeding than the exhaustion resulting from the delirium tremens, prejudiced by the absence of proper food, or the substitute for it of rectal alimentation.

As regards medicinal agents, there appeared no indications at the onset of the attack for the exhibition of stimulating drugs, and the occurrence of hæmatemesis seemed to me to be a sound reason for not using them. On the second and third day, too, of his attack the pulse continued so uniform and steady that still there appeared no special indications for stimulation, while one felt that sleep must come soon.

When, however, the sudden cardiac collapse occurred —due, I believe, to the epileptiform seizures—it was too late to expect that they would be of any service.

As regards the drugs of a sedative order, which might have been used with the view of alleviating the delirium or procuring sleep, my feeling was that they were not likely to be effective, and would be, therefore, positively harmful.

My experience, however, in difficult cases of this kind is not great, and on the question of drugs I am still of an open mind, and will welcome from Guy's men any suggestions and criticism on the points raised.

Surbiton. H. C.

Papers by Guy's Men.

The Treatment of Dupuytren's Contraction and other points in the Surgery of the Hand. By A. H. Tubby, M.S., Lond., F.R.C.S. Eng.—*The Lancet*, 12th January.

Some Remarks on Hernia, its Causation and Treatment. By W. Arbuthnot Lane, M.S. Lond.—*Clinical Journal*, 16th January.

Death of an old Guy's Sister.

Many old Guy's men will be sorry to hear of the death of Miss Barker, who entered service at Guy's in 1860, and who was Sister in Mary, Philip, Clinical and Samaritan Wards, successively. She became Housekeeper about 1881, and remained in that capacity until her retirement in 1889.

She was quiet, gentle, and unassuming, and had such a kind disposition that she was beloved by all the nurses under her. She was thoroughly conscientious in her work, and devoted herself absolutely to the interests of the patients placed under her charge. She was a Wesleyan and used to attend most regularly the little chapel in Maze Pond. But her piety was so unobtrusive that only her intimate friends knew where she worshipped.

When she left Guy's she went to live with her niece, Miss Annie J. Barker, by whom she was greatly beloved, and who tenderly ministered to her in her last illness. She died from cancer of the throat, which grew very rapidly, proving fatal before it was possible to operate. During her illness she never once murmured, but bore the pain with great patience and fortitude. She was constantly dreaming that she was back at Guy's where she had spent the best part of her life.

She received a pension for long service from the Governors of the Hospital when she retired, and she enjoyed it for about eleven years. She died at the age of 75.

Nursing News.

Matron's Office.

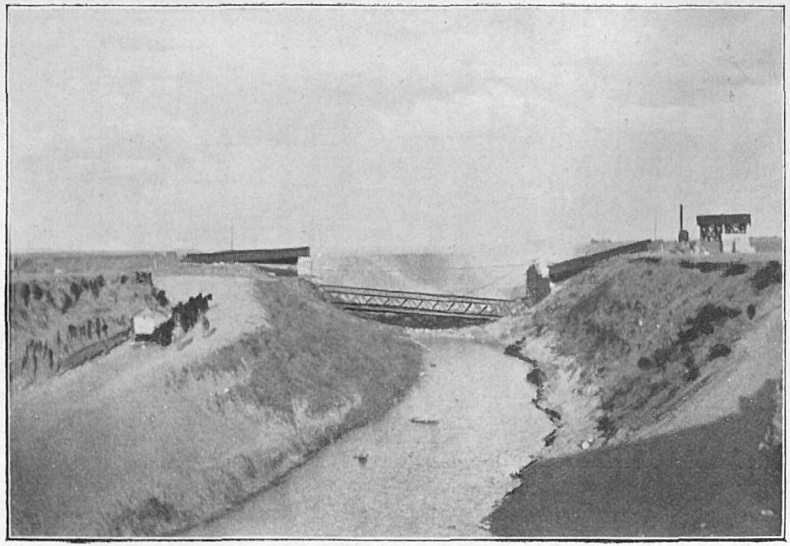
On Tuesday, January 22nd, Miss Gertrude Dewhurst (Sister Gertrude) took up her duties as Probationary Sister in the Out-patient Department.

On Tuesday, January 29th, Probationer Blayney was appointed Head Nurse in the Eye wards.

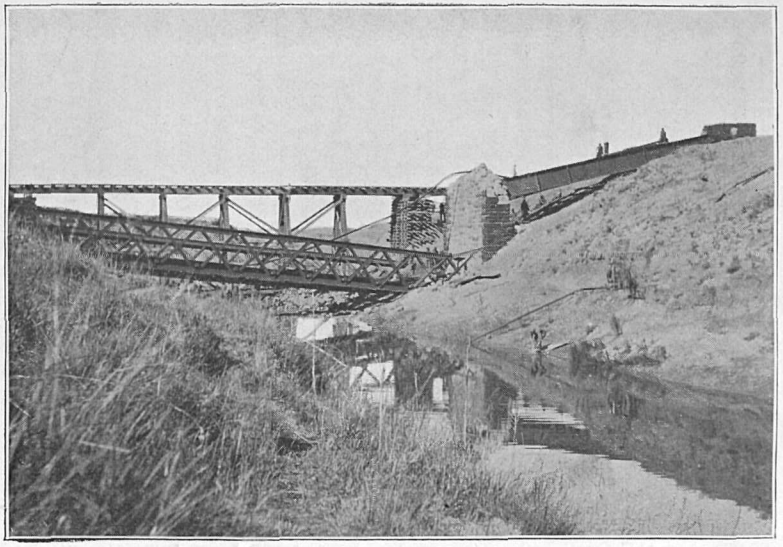
On Tuesday, January 29th, Probationer Harradine was appointed to succeed Nurse Houstoun as Head Nurse in Naaman ward.

Invalid and Infants' Foods.

"Frame Food" has been tried for some time in the wards of Guy's Hospital. Most of the patients like it, and in one or two cases it has been taken satisfactorily when ordinary food has been refused, and the patients have improved on it. The "Frame Food" Jelly is taken by children and adults alike with great relish, and when spread on bread is indistinguishable in flavour from good preserve.



Rhenoster Bridge blown up. Hospital Waggon crossing.



Same Bridge nine days later. First Engine waiting to cross.

"Cow-Gun" crossing a Drift. Infantry crossing beyond.

Swazi Women in Camp.

Passim.

We are indeed a sorrowing people. Every day brings to some of us the sad tidings of death which has overtaken one dear to us, serving the country at the front. In this very issue we have to record the death of another of our men who has fallen a victim to typhoid. And in the midst of these numberless personal sorrows, a universal overpowering grief has fallen upon the whole nation. We have lost our Queen. For those of us who have known no other Sovereign, our loyalty seemed bound up with her personality. We seemed united by the bond of her personal sympathy and goodness. Our very losses were instigated by the thought that those dear to us had died for our Queen, and we knew that she felt for each one of us in our sorrows; and now she is no more. It is not our duty here to attempt to represent what this means to the nation in its several aspects. We cannot even express its significance in our own sphere. We can only repeat the first words of the Bishop of Winchester's address last Sunday at Osborne—"What can I say, what can any man say? . . . We can but look into one another's faces, grip one another's hands, and be still. She is gone and we are blankly bewildered. . . . She was our own, and she has gone and life looks quite different."

Yet even in our deep grief we find consolation in the knowledge that she will ever live in the memory of the nation as an ideal to all people of a woman, a mother, and a queen. Throughout her glorious reign we trace her personal influence in all aspects of life, and most especially in that which so nearly concerns us engaged in a work of public charity. In no country and in no age has philanthropy been so conspicuous as in the reign of our late Queen. From the beginning she has nurtured its growth, not only by extending her royal patronage and protecting care to the charitable endeavours of her subjects, but also by her personal sympathy and example. That example we have seen most nobly followed by her son, as the Prince of Wales, and to him we now look with confidence as her successor and our King, to continue that work of kindly sympathy by which she has made herself so beloved by her people.

A beautiful Cross set with white flowers has been sent to the Royal funeral from the Governors, Staff, and Officers, on behalf of the hospital, "In memory of their beloved Queen."

It is with deep regret that we have to announce the death of C. B. Sells, of enteric, at Deelfontein. Most of those now at the hospital will remember him well. He had finished his compulsory appointments at the hospital, and was reading for his finals, when he decided to volunteer for the war. He was exceedingly keen to go out to the front, and eventually enlisted in the 31st Company Imperial Yeomanry, and was appointed Lance-Corporal. Many will remember the enthusiasm with which he discussed his prospects of being accepted, either as a medical orderly, or as a "Tommy" in the Yeomanry. It appears that latterly he was employed in his medical capacity at Deelfontein, and there he contracted enteric and died on 22nd inst. He was in every way an excellent fellow and his loss is much to be lamented. He was the eldest son of Dr. Sells, of Guildford, to whom we tender our most sincere sympathy.

It will be remembered that Mr. Herbert Durham, son of the late Mr. Arthur Durham, was sent out last year with Dr. Meyers by the Liverpool Tropical School of Medicine, to investigate the cause and conditions of the yellow fever at Para. We have just heard that both he and his colleague contracted the disease, and have been seriously ill. Dr. Meyers has, we regret to say, succumbed to the disease. But we are able to state that Mr. Durham is now considered out of all danger, and rapidly progressing towards recovery. We wish him a safe and speedy return to his friends.

On Saturday last, those of us whose duties permitted assembled at Waterloo Station to give a final hand-shake and a parting cheer to R. C. Mullins and A. H. Carter, bound for Pretoria as civil surgeons at the Imperial

Yeomanry Hospital. Since he came up to the Hospital from Oxford in '97, "Mull" has been a leading spirit among us; popular with football men as a good comrade and indomitable leader, and not less so with all others who knew him, from the charm of his personality. He twice played in the team that won the Rugby Cup, and was for two seasons Captain of the fifteen, so that his loss in the Cup ties this year will be severely felt. But it is in the general life about the Hospital, and at the Residents' table, where he filled the Presidential chair, that his influence will most be missed. While there is no man we could be more sorry to lose, so there is none we could more gladly send abroad as a representative of the Old Hospital. He is returning to his native country, where we wish him every success, and where we are glad to hear that he has the offer of a post as surgeon to a mining company, when his present engagement is ended. To "A. H." we can say good-bye with a lighter heart, since we hope soon to have him back again. The best wishes of all Guy's men go with them both.

ELSEWHERE will be found an obituary notice of an old Guy's Sister, Miss Barker, who will doubtless be remembered by many old Guy's men. She was Sister in several wards from 1860–81, and then became housekeeper till 1889, when she received a pension. She died of cancer of the throat, being 75 years of age.

THE last few months have seen a great revival of interest in chess, and a vigorous effort will be made to win the Inter-Hospital shield *in toto* this year. The annual competition for Dr. Shaw's cup will commence on February 4th. There will also be a chess handicap beginning on the same date. In the latter competition there will be three prizes, two of which have been kindly presented by Mr. Halley Stewart and Mr. Wyatt. Particulars and conditions of these competitions may be obtained of the secretary. Meetings for practice are held in the club smoking-room every Wednesday evening from 8 to 10.30. The annual subscription is 2s. 6d. each, and should be paid to E. H. B. Milsom, hon. sec.

WE publish under Correspondence, a letter from Mr. Pakes, in which he makes an appeal for subscriptions to equip a Bacteriological Laboratory to accompany the forthcoming antarctic expedition. Dr. Koettlitz, a Guy's man, has been appointed medical officer to the expedition, and he has charge of the plankton and bacteriological department. He is eminently suited to this position, as he accompanied the Jackson-Harmsworth expedition in a similar capacity. The funds allowed for the bacteriological equipment are exceedingly inadequate, and as this is the first time that bacteriology has played a part in an antarctic expedition, Mr. Pakes appeals to Guy's men to help to make it a success. The object is certainly thoroughly worthy of support, and we hope the appeal will meet with a generous response. We shall be pleased to acknowledge subscriptions sent to us for the fund, and to forward them to Dr. Koettlitz, or they may be sent direct to him, Bacteriological Laboratory, Guy's Hospital.

AN interesting account of a case of Delirium Tremens, from a Guy's man, will be found in this issue. It is hoped that it will give rise to some comments and criticism from those most qualified to speak on these matters. One of the chief objects of this GAZETTE should be to afford a means of free exchange of ideas among Guy's men, and it is much to be regretted that considerable apathy exists in this direction. How often do many feel disposed to criticise, oppose or comment upon some opinion, medical or otherwise, which may be expressed in such a journal as this, and yet the necessary stimulus to do so fails! Nothing would tend to enhance the interest of our GAZETTE so much as a good correspondence column, but for that purpose we need the correspondents. There are plenty about *in posse*, and if only they would sacrifice occasionally a small portion of their valuable time to this object, they would confer a great boon upon the Guy's public.

WE publish a letter from Dr. Floersheim of New York, asking for information regarding the effect of Suprarenal Capsule on the heart and pulse in cases of organic heart disease. If any

one will volunteer data on the subject we shall be pleased to forward them to him.

An American Gentleman, Mr. Dudley Leigh, has, through the medium of the King, then Prince of Wales, kindly offered to Guy's Hospital a Horse-Ambulance of the latest pattern, and the offer has been accepted. It will undoubtedly be of great service to the Hospital and will prove of especial use for the quick removal of cases in the Charity to the Hospital.

We have received cheery news from Mr. Stanley Hodgson, from Teneriffe, and again from Sierra Leone. The following extracts will be of interest to some of our readers. "This line of steamers is not exactly a fleet of Cunarders: the boats are more or less of the tramp class, and the passengers are all old coasters who know every white man on the coast. The usual type of conversation is as follows: 'Did you know a man called Holmes?' 'Not 'Arry 'Olmes?' 'Yes, well he's dead.' 'Really, I knew him well. He was a first-class bounder.' This is his obituary; for on the coast it is *nil nisi malum*." And again, "Of the theories of malaria, of the evils of quinine, and the virtues of Johnnie Dewar as a prophylactic I have heard no end, but Capt. Way, my chief, gives me *carte blanche* with his party, so we have been already a week on 5 grs. of the drug." He goes on to describe the medical men practising in the West African colonies in anything but complimentary terms, and says, "the best doctors as a rule are niggers, and Way says that the only one in whom he had complete confidence was a darkey. This, from a British officer, accustomed to natives, means a very great deal."

Subscriptions continue to roll in slowly from far and near for the South African Memorial Fund, and we publish elsewhere the letters accompanying donations from H. E. C. Fox at the Pyræus, H. Hewetson at Burma, and Dr. Herbert Starling. Mr. Fripp's firm has also contributed £1 to the fund, which we understand was subscribed at the same time as the 30s. from the corresponding senior firm (Mr. Jacobson's), and should have been acknowledged at the same time in our last issue. Looking over the many suggestions that have been made as to the form the memorial should take, there seems to be a considerable preponderance of opinion in favour of a memorial in the Park. In order to carry this out in a form at all suitable to the site, we shall have to see a considerable addition to the sum already subscribed. We have every hope, however, that the list of willing subscribers is far from exhausted.

The sum of money found in the collecting-boxes of the Wards and Surgeries during last year, compare well with those of the preceding year. The total sum collected in 1900 amounts to £291 7s. 10d., as compared with £173 3s. 3d. for 1899. Of this sum £137 18s. 8d. was collected in Bright. In Queen and Eye Wards £52 11s. 10d. and £21 10s. 10d. were collected respectively, the Conservation Room collected £8 1s. 0d., the remaining sums vary between £1 and £6.

Elsewhere will be found the balance sheet of the Out-Patients' Tea Fund, together with a letter from the Honorary Secretary. The Fund is in a very flourishing condition with a balance to the good of £87 17s. 6d., of which £30 is to be carried forward for next year and the rest distributed to allied funds which do not enjoy such prosperous popularity.

We have to correct a serious printer's error committed in our last issue. Dr. Nason, of Stratford-on-Avon, whom we congratulated on the honour recently done him by those associated with him in his work, was represented as "Dr. Nanson." Doubtless his friends knew well to whom we referred, but we offer him our apologies for the mistake of giving his name an extra "n."

Appointments.

CIVIL.

Bell, H. T. S., F.R.C.S. Eng., has been appointed Acting-Visiting Medical Officer, Jubilee Sanatorium for Consumption, Dalby, Queensland.

Coleman, E., M.B., B.S. Lond., L.R.C.P., M.R.C.S., has been appointed District Medical Officer, Sleaford Union, *vice* J. H. Pine, resigned.

Two Cases of Croupous Pneumonia.

THESE cases seem worth recording, to be read in connection with Dr. Pitt's lecture on Pneumonia reported in the GAZETTE on December 22, as they afford strong evidence in favour of regarding the disease as a specific infective one.

On August 15th, 1900, Ellen F., æt. 43, with no history of any serious illness, and five months pregnant, was suddenly seized with pain in the right side of the chest. There was dyspnœa, cough, and temperature 102°. She continued very ill for a week, when the temperature became normal. At the end of a fortnight she was able to leave her bed. My impression was she probably had a small patch of pneumonia as well as pleurisy, but the physical signs were not distinctive of the former.

On September 26th, James F., æt. 42, her husband, farm labourer, also with no history of illness, was seized with pain in the left side of his chest, and early the next morning he had a rigor, when I first saw him. His temperature was 103°, and he later developed a typical croupous pneumonia of the left lower lobe.

On the fifth and sixth days of the attack he was actively delirious, and frequently getting out of bed. On the seventh day he lay picking at the bed-clothes, did not recognise anyone, but could be roused to take nourishment. Tongue dry, and pulse 120. At midnight he fell asleep, slept seven hours, and awoke rational. He remained in bed three weeks, the physical signs and cough only disappearing slowly. Two months elapsed before he resumed work.

On December 2nd, Ellen F., now perfectly well, was confined at 5 p.m., labour being completed quite naturally before my arrival. She progressed quite normally up to the afternoon of December 7th, when she was seized with pain in the left side of the chest. Bilious vomiting also commenced, and persisted until December 9th. On the evening of the 8th, I found her with flushed face, quickened pulse and respiration, pain in axilla, but no physical signs to be detected as yet.

On December 9th, morning temperature 104°, pulse 120. Fine crepitations audible at the left base, and on the 10th, the whole of the left lower lobe was solid with croupous pneumonia. On the 11th (5th day), she became delirious. Diarrhœa also came on and continued during the next day, the motions being passed into the bed.

On the 13th, the delirium, previously quiet in character, became active. She talked incessantly and noisily, threw off the bedclothes, and refused all food. Tongue dry and pulse 126. She fell asleep about midnight for three hours, and awoke quite rational. The physical signs cleared up rapidly, and she made an uninterrupted recovery.

I may say there were never any symptoms pointing to puerperal infection.

Remarks.—These cases occurred in a small thatched cottage with one bedroom, one end being partitioned off where three children slept together. Two other children occupied a single bed in the same room as the patients. These children have remained well. A fortnight after the woman's first illness, her husband again occupied the same bed. When the man was convalescent, they again slept together up to the time of the woman's confinement. The bed and bedding were unchanged and never disinfected, the sheets and pillow-covers excepted probably. As the woman had not been up, and there was no cause discoverable for her illness, one can only conclude she must have become infected by pneumococci still lurking about the bedding. Possibly her recent confinement rendered her more susceptible to the infection. Being also somewhat addicted to alcohol would predispose.

Lastly, the treatment was almost identical for both. Linseed poultices while pain continued. Internally a mixture of Liq. Ammon. Acet. Vin. Ipecac, with Liq. Morph. the first three or four days. To this was added Pot. Bromid. grs. xv., and Sp. Ammon. Aromat. ɱxv. 4tis horis, when delirium arose.

In the case of the woman, Tinct. Digitalis ɱx. 4tis horis was added on the seventh day, when she also had Bromidia ʒj. at night.

Both were given Brandy ʒj. 3tis horis from the fifth day, but doubtless they would have recovered just as well without it. Diet: Milk and Beef Tea.

JOHN CRISP.

Pass List.

Second Conjoint Examination, January, 1901.

H. W. Bethell, J. Bromley, C. M. L. Cowper, H. Johnson. H. E. Morris, C. H. Reinhold, F. H. Wallace, H. Watts.

First Conjoint Examination.

PART I.—(CHEMISTRY AND PHYSICS).—L. H. Burner, I. R. Fearn, M. Leckie, R. P. Lewis, J. O. Musson, W. Reeve.

PART II.—(PRACTICAL PHARMACY).—A. J. Beadel, J. F. Douse, E. J. Gaffney, G. S. C. Hayes, W. P. Ker, T. G. Miles, P. F. Minett, A. C. Osburn, A. W. Soper, F. E. Wilson.

PART III.—(ELEMENTARY BIOLOGY).—J. B. Ball, L. H. Burner, W. H. S. Burney, A. H. Clough, V. A. P. Costobadie, T. R. Harvey, F. Morres, A. L. Morgan, H. H. Moyle, J. E. Scales, L. D. Stamp, E. White.

(Four Years' Regulations.)

PART I.—(CHEMISTRY AND PHYSICS).—E. W. Routley.

PART II.—(MATERIA MEDICA).—E. W. Routley.

Royal College of Surgeons of England, January, 1901.

PRELIMINARY SCIENCE (L.D.S.) EXAMINATION.

H. S. Chandler, H. Croot, A. R. Durant, E. Farrant, A. L. George, A. Goodey, H. W. Jones, L. U. Ransford, N. B. Soper, W. S. Stevens, T. Vernon.

The Imperial Yeomanry Field Hospital and Bearer Company.

(*Continued*).

Our first move out of Pretoria was in a south-easterly direction to join General Mahon's Mounted Infantry Brigade, to which we were to be attached. Not knowing our way very well we took a wrong road, and were marching serenely towards a Boer laager, when the most advanced outposts of our own force saw us, and directed us aright. But for this we might have again found ourselves in the hands of the Dutch. We now had our first experience of working with an army. The mission of the force was to drive the enemy eastwards in the direction of Bronkhurst Spruit; this was accomplished after two or three days' shelling. Our ambulances were out daily, and we had a few wounded to treat. One of our shells burst in the middle of a Boer lunching party, killing four and wounding five. Lyddite is a very satisfactory explosive when it finds its mark!

Next we moved down to Springs with a convoy of wounded and sick, and then returned to Pretoria, which we left next day in a north-easterly direction, and rejoined Mahon's brigade, which with Ian Hamilton's division was making for Bronkhurst Spruit. Here we learnt that another field hospital had had a narrow escape on the previous day, a shell falling in the very spot where one of their tents full of patients had been pitched ten minutes previously. We did not see much of the fighting, which was mostly of the nature of an artillery duel, and driving the enemy back, we reached Bronkhurst Spruit. Here we had, amongst other work, to deal with a Kaffir who had been wounded in the liver and kidney *via* a bullock that was being shot for food. I chloroformed him, and Mr. Stonham, of Westminster, our chief surgeon, removed a portion of belt from his liver, but was unable to find the bullet. The man, however, was doing very well when we sent him back to Pretoria.

Leaving Bronkhurst Spruit, we started on a seventeen miles march eastward to Balmoral. The day was cloudy, and rain began to fall, with a bitterly cold wind. We pushed on with many delays until we were stopped at a spruit about three miles from Balmoral, in the mud of which was stuck a Cape cart, whose horses absolutely refused to budge. No pushing could move it, the water rose rapidly, and the mud became softer and softer. The intense darkness of a moonless night came on. Our waggons attempted to cross, one got safely over, passing by the side of the Cape cart, but the next one stuck, and no number of extra spans of our utterly done-up mules could shift it. Lanterns were lit, the rain and wind continued, the stream still rose. A few adventurous vehicles from the miles of convoy behind us pushed across, but for most of us it was apparent that we should have to wait where we were until the night was past. Mounted men and foot soldiers, tired Highlanders with their naked legs, pushed on past us and made the best of their way to camp. The scene on the other side of the drift almost defies description. On one side of the road was a narrow deep ditch, on the other a stuck "cow-gun." Nothing could be made out in the darkness, but of noise there was plenty. As I sat on my pony I was in the midst of a struggling, shouting crowd; horsemen crossing the drift kept falling into the ditch, extracting themselves with much struggling and swearing, and shouting to their comrades to look out. On the other side an ox-waggon was struggling to get across, and the weird-looking horns of an ox would suddenly appear underneath one's horse's belly. Wet through, we managed to get up a tent in the wind and rain—we had outspanned along the road just as we halted—and crawling in, got to some extent dry, while we comforted ourselves with "bully" beef and biscuits. I do not think I ever enjoyed cold fat more than I did that night, and I appreciated the reason of the ordinary diet of the Esquimaux.

But many had far worse experiences than ours of the hardships of that night. One officer, two men and three or four blacks, died as the result of exposure. The officer probably asphyxiated in the steaming smoky atmosphere of an improvised shelter underneath a tarpaulin, where a fire was lighted and many were crowded. Some of the men managed to light fires, round which they huddled. A result of this was brought to our hospital later: a nigger lad who having gone to sleep with one of his hands near the fire, had had nearly all the skin burnt off.

Nearly four hundred mules and oxen died that night. We lost twelve of ours, three lying dead in a heap as they had huddled together to try and keep themselves warm. Alone on the velt stood an old horse, fully harnessed, pathetically regarding his yoke-fellow who lay dead by his side.

We pushed on to Balmoral, only, however, to return, for the plan of campaign was altered. At Bronkhurst Spruit I took charge of a convoy of patients and went with them by train to Pretoria. Two days later the force marched in, and were inspected by Lord Roberts as they crossed the square. Our hospital looked very smart and workmanlike, Mahon's Brigade at this time consisted of:—The Imperial Light Horse, Lumden's Horse, Queensland Mounted Infantry, Imperial Bushmen, Roughriders, Fife and Forfar Yeomanry, 3rd Mounted Infantry, M Battery Horse Artillery, S Section "Pom-Poms," part of the Australian Bearer Company and our own body. There were also some Engineers and an Hussar escort for the General, upon whose Staff amongst others was Prince Alexander of Teck.

Leaving Pretoria, we moved due west, north of the Magaliesberg, and soon crossed the Crocodile or Limpopo River, one of the largest in Africa, not far from its source. On our way we drove back a troublesome nest of Boers who had been an annoyance close around Pretoria for some time, with a loss to ourselves of only five wounded. One man was hit in the arm by a spent bullet, which only went in half way, and he pulled it out himself.

We had no further serious fighting, only a little sniping on our flanks, until we reached Rustenburg. Ian Hamilton's division, which took a somewhat different direction was, however, heavily engaged when crossing the Magaliesberg.

All the district around the Magaliesberg is most fertile, and the country is dotted with farms, which are irrigated with but little artificial aid by the many streams running down from the mountain side.

Oranges and lemons, poultry and pigs abound, and Tommy's off moments are delightfully spent in provisioning himself from the deserted farm houses. This, too, is the tobacco country, and although the brand is not of a kind that appeals to many of our palates, still for many it is the only one available.

At Rustenburg we met the far-famed "B.-P.", who with a mixed force was holding that place against a strong force of Boers. He had previously sent our General a characteristic map of the country around Rustenburg, showing the dispositions and strengths of the various forces of the enemy, with the number of guns in their possession. However, on our arrival they had dispersed, and we made a bloodless entry into Rustenburg.

This is a pretty little town nestling against the slopes of Megaliesburg, with its gardens watered by little streamlets. Here we took in charge a number of wounded from Carrington's force, a portion of which had unfortunately been ambushed a few days before, but gallantly held out until relief arrived, although they lost nearly all their horses.

On the following day our Bearer Company went out with a Flying Column, pursuing the enemy in a southerly direction, but returned in the evening after a "blank day."

From Rustenburg we went back as far as the Crocodile River, thinking we were *en route* for Pretoria, but here we got fresh orders, and coming through Commando Poort and Nitral's Nek, the latter place memorable as the seat of the unfortunate surprise and capture of the Scots Greys and Lincolns a short time previously, we reached the south side of the Magaliesberg. I accompanied one of our ambulances that went with a portion of the force through Nitral's Nek. The country was bushy and there was constant sniping on our flanks, but fortunately no casualties. We came through the formidable "Nek" with extreme caution, one semi-detached kopje and two mountain peaks frowning down upon us. Then on the other side we halted, watered our mules, and lunched, protected by the guns of "M" battery trained on the Nek. There were dramatic elements in the situation, but nothing happened.

At Rustenburg, too, by-the-way, we found as prisoner one of Kruger's sons, and brought him with us on his way to Pretoria,—a stout well-bearded Dutchman travelling comfortably in a Cape cart. Turning westwards now we learnt that we were taking part in a chase of our old friend Christian De Wet, who was trying to make his way north to join Delarey, one of the Transvaal generals. We journeyed hurriedly westwards, but although pursued by forces from all sides, under Generals Methuen, Smith-Dorrien, Kitchener, and Broadwood, besides Hamilton's and Mahon's commands, De Wet managed to get through and crossed the Magaliesberg at Oliphant's Nek. Here he made a stand and a battle was fought on August 17th., our ambulances were well to the fore here, the guns of the Elswick battery firing over their heads as they advanced close behind the firing line; but the enemy made but little stand, and passing through the Nek we again reached Rustenburg.

Unfortunate little town! type of many in South Africa, the inhabitants never knowing from day to day whether Boer or Briton was their ruler. Leaving Rustenburg we followed our former route westward, being constantly in touch with the enemy, and all began to feel the excitement of the chase of the combined forces of Delarey and De Wet. Reaching a place called Sterkstroom at dusk, Mahon's brigade left again at midnight, and the mounted men pushing forward reached the Crocodile River, where they bivouacked, no fires, pipes, or talking being allowed, for it was hoped the attack would be a surprise. We had reason to believe, however, that a Boer woman from a neighbouring farm had betrayed our presence to the enemy. At daybreak the attack was made, and continued on the following day. The Dutch occupied a strong position along a ridge of kopjes, but under the fire of the Elswick battery they were driven back, and we pursued in a north-eastwardly direction, co-operating with another force which was moving along the railway line north. This was the fight of Crocodile Kraal. We had several casualties, one promising young officer of the New Zealanders being killed. Here, too, one of our ambulances was temporarily detained by the Boers, but came back in the evening.

The chase now became fast and furious, the Boers as they ran leaving many horses, waggons of ammunition, and stores, and their ambulance behind; the latter, a forlorn looking little arrangement to which was attached one nurse. A considerable number of prisoners—stragglers from the Dutch main body—were also taken.

The pursuit was continued as far as Warm Bad, but the enemy's force broke up; De Wet, we heard, having taken the best horses, with a small body of mounted men and hardly any baggage, had doubled back to the Free State.

On this trek we passed through a collection of Kaffir villages known as the Swartz Boys' Location. We heard that there had been war here a short time back between two rival sections of the native community, the one under a queen, the other under a king. The queen's side getting the worst of it, she retired to her hut and put up a white flag. Evidently quite familiar with the usages of civilised war.

On this journey, too, we passed through the monotonous bush-veldt, crowded with prickly mimosa and with its paths deep in sand. Warm Bad, on the northern railway line to Pieterburg, is a funny little place with a hot spring, which supplies a number of baths, arranged in

two rows of bath rooms built of galvanised iron, on each side of a wide causeway. Here we had a day's rest, and ample facilities for a much-needed wash of ourselves and our garments.

We left Paget's Brigade—which we had met there—at Warm Bad, and our whole force (Ian Hamilton's and Mahon's) returned to Pretoria. On our way we passed through Waterval, where the prisoners were confined, and saw an ingenious tunnel, which they had nearly completed when rescued by French, and also the light, a bit of candle stuck in part of an old meat can, by which they worked.

Being now pretty well "fed up"—to use a local expression—with war and its attendants, we rather hoped to hear something of going home, for great rumours were afloat of the disbanding of the volunteer and irregular forces. However, we only had a day at Pretoria. This was occupied principally by shopping; soap, tobacco and whisky being the articles most in demand. Literature, too, I sought for, but some of the results were rather discouraging, the intelligent youth at one bookseller's saying in response to a query,—"Dickens! let me see, he wrote poetry, didn't he?" Dinner and a game of billiards at the Pretoria Club formed a contrast to the rigors of the Veldt.

Then, leaving Ian Hamilton's division, with which it had worked for more than a month, Mahon's Brigade left Pretoria and moved eastward once more. The Brigade was much weakened by the number of men who had to be left behind for want of remounts, but still up to any amount of work. Our march at first was without incident. Following the railway we passed at Bronkhurst Spruit the graves of the victims of the 1880 disaster. Then as we neared Balmoral, the many bodies of mules and oxen reminded us—and in a very unsavoury way—of the bad night we had had there some six weeks before. One morning, a day or two later, as we were leaving Wonderfontein, a place halfway between Middleburg and Balmoral, we heard the sound of heavy guns behind us, and soon after we had started an orderly, clad in an emergency costume of pyjama legs and khaki coat, galloped past our line of waggons asking for the General. The Boers were attacking the line of communications about six miles back, guarded by a force of some 80 Canadian Mounted Rifles. Back came the mounted troops, and the battery, and two of our ambulances accompanying them, they made for the scene of action. The baggage halted, guarded by infantry, who had joined us at Wonderfontein. Before the arrival of the reinforcements, however, the gallant Canadians, who were well entrenched, had driven off the Boers with a loss to themselves of only five wounded. So we had nothing to do but give them much deserved congratulations, and proceed on our journey.

Leaving the railway line and moving in a south-easterly direction, we soon reached Carolina, where we joined General French, with two cavalry brigades.

From here we sent our patients, as an *unescorted* convoy, to Belfast. We knew that they were almost sure to meet Boers on the way, and we subsequently heard that they got through safely—a tribute to the enemy's respect for the Red Cross.

After a halt of two days, began one of the hardest and most eventful marches in which our Field Hospital and Bearer Company had as yet participated. Our objective was Barberton, which we were to reach as rapidly as possible by a "bee-line" across a most rugged and difficult country, very suitable for defensive operations. This march, we learnt later, our enemies had prophesied we should never complete—in fact, one of the many rumours which they circulated was that, bootless and without food, we were wandering, lost amidst the mountains!

However, we did much better than this, for, leaving Carolina on September 9th, our mounted men, with General French at their head, entered Barberton on September 15th, quite three days before the Boers expected them—a brilliant march, which resulted in the capture of many prisoners, and the acquisition of much-needed supplies. Rumour also said that gold to the value of £10,000 had fallen into our hands. The remnant of our fellow-countrymen still in the hands of the Boers were released here, and the positions of jailers and captives reversed.

To reach Barberton we had on one occasion to go up a hill, which occupied the baggage for three days; treble spans of oxen and many extra mules were used. Almost every day there was fighting; the animals were dying wholesale from fatigue and lack of forage. The wounded and sick were numerous, and we had to carry them all in our own or borrowed waggons. These few incidents show that the march was no light task to those engaged.

The first day out of Pretoria we witnessed a very pretty fight, the guns operating from the top of a ridge, and then our infantry driving the Boers across the open. The convoy followed up rapidly, and several shells burst near us, one killing a mule.

A cumbrous "cow-gun" was dragged about with us, but never came into action. We had it "up our sleeve," so to speak. So much was one of our orderlies impressed by it that one day when asked a patient's temperature, he gravely replied, "four point seven!"

After negotiating our big hill we crossed a high plateau, and then descended, almost 2,000 feet, a most formidable declivity with the appropriate name of the "Devil's Shoot." This brought us to the large natural basin in which Barberton lies, and later we toiled slowly in, with our load of patients, with borrowed ox-waggons, and with all our ponies inspanned to replace our dead and help our exhausted mules. We camped closed outside the town, and the last bit of news we heard before going to bed was that there had been sniping from some of the houses on our troops, and that French had posted notices saying that if there was a recurrence of this he would withdraw the troops and shell the town.

There was little rest for me, for next day while enjoying the repose of a "Europe morning," I was sent out as regimental surgeon with the Imperial Light Horse who were going on a "special mission." We were to go without transport, carrying three days' rations and forage on our horses. I reported myself to Colonel Wooles Sampson and we started, and climbing up a steep mountain road reached the Sheba Valley, and saw the far-famed Sheba gold mines. We bivouacked that night near Avoca, a place with the unpleasantly suggestive name of Fever Valley. Next morning we went due east, and reached Louws Creek at the foot of French Bobs Hill; these names are remnants of former gold prospectors. Here we off-saddled and waited while the Field Cornet from Barberton went up the hill to interview the Boers. There were 150 of them in laager some distance from the top and it was hoped they would surrender. While we were waiting a group of grotesquely attired Swazis came up, the leader bearing a white flag! and sitting in a semi-circle round the Colonel had a regular palaver. Assured of British protection, they gave various bits of information (of uncertain value), and were then regaled with sugar and water!

The Boers sent down to say that they would give a final answer at 8 a.m. next day; so early in the morning the Field Cornet and one of the Imperial Light Horse officers went up the hill again. It was arranged that if the Boers surrendered, a white flag should be waved three times on the crest of the hill. We waited and waited, watching the hill but nothing happened. Finally, twelve Boers who had surrendered were brought down; the others had trekked, having been frightened by a patrol from another force. So unfortunately the "mission" was not a complete success. I obtained a Mauser carbine and bandolier from one of the Boers.

Returning to Avoca, we halted, having received a message that we might have to go twenty miles in another direction to capture some Boer waggons and cattle. This was somewhat distressing, as the rapid marching without forage would probably be the death of our much tried horses. However, the guide, when he appeared, turned out to be a native, and utterly untrustworthy, so after some delay we rode back to Barberton, following the Queen's river, which we crossed and recrossed in the darkness. On this ride my poor old pony finally gave out, and I had to leave him behind to be shot.

At Barberton, our hospital remained stationary until October 2nd, when, leaving our patients at the civil hospital there, we went partly by rail and partly by train to Machadadorp, for the few mules left to us could not drag all our waggons. My part was, with a brother officer, to supervise the train journey. We had two open trucks, and the weather was very bad. We travelled very slowly, taking four days to reach Machadadorp.

Starting in pouring rain, at Avoca three men struck by lightning came under our care, none seriously hurt, but one had all the hair taken off his left arm. A bell-tent put up in the truck kept off the rain to some extent. At night the train is laid up in a siding, and we camp by the side of the line. At Kaapmuiden the main line is reached, and from here the train runs through the beautiful valley of the Crocodile river. The river runs amidst huge boulders with precipitous cliffs on each side. Between Watervalonder and Watervalboven the ascent is so steep that the engine goes up by means of a "clutch" arrangement beneath it, gripping a central line. Here, too, is a stuffy, unventilated tunnel, to remain in which another moment in the sulphurous smoke, one felt would have been death.

I had had "fever" since leaving Barberton, so at Machadadorp transferred myself to the train of the Chief of Staff coming up from Komati Poort. Thus Pretoria was reached fairly speedily, but not without incident, for the train in front of ours, containing a portion of the Naval Brigade, was derailed by a dynamite cartridge put on the line. The train was going dead slow, so no harm resulted, but if ours with its speed, almost terrific in this country, of sometimes twenty miles an hour, had rushed into it, the consequences might have been much more serious.

Reaching Pretoria, a short sojourn in the Yeomanry Hospital there, under Dr. Washbourn's care, put me right again.

Circumstances prevented my rejoining the hospital, and here this narrative must conclude for the present.

You will say that I have told you much about "trekking" and its circumstances, something of war, but very little about bullet wounds. My reasons are two-fold. It is difficult to introduce technical details into a narrative such as I have given, and I feel sure that you have been satiated with the surgical and medical features of this war from other sources. Of experience we had plenty, for besides Bearer Company work nearly 2,000 cases of wounded and sick were treated in our hospital. Therefore, if at a future date some details from my own observation of the nature and result of bullet and shell wounds may interest you, I shall be pleased to give them.

WILLIAM SHEEN.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

South African Memorial Fund.

DEAR SIR,—I have much pleasure in enclosing a subscription to the South African Memorial Fund, which I see through the columns of the Hospital GAZETTE that you have started. I am inclined to vote for a monument in the Park as the best way of perpetuating the memory of those who had fallen in the war.—I remain, yours faithfully, H. HEWETSON.

Station Hospital, Rangoon, Burma.
January 6th, 1901.

DEAR SIR,—I hope that the enclosed small subscription may not arrive too late to be added to those already received for the South African Memorial Fund. I trust that the memorial may take the form of some permanent material set up in some conspicuous place like the Park.—I remain, yours very truly,

HERBERT J. STARLING, M.D.

55, Carlton Hill, London, N.W.
January 26th, 1901.

DEAR SIR,—I have much pleasure in enclosing a P. O. for £1 towards the South African Memorial Fund, which I am so glad to hear is being raised to perpetuate the memory of those Guy's men who have sacrificed their lives for their country in South Africa.—Yours truly,

H. E. CROKER FOX, M.B., R.N.

Pyræus, January 13th, 1901.

The Antarctic Expedition.

DEAR SIR,—I should feel obliged if you would make known through the columns of the GAZETTE that Dr. Koettlitz—an old Guy's man—is to be in charge of the bacteriological investigations which are to be undertaken in the forthcoming expedition to the Antarctic regions.

I understand from Dr. Koettlitz that the available funds are by no means too great, in fact, they are too small, and I venture to hope that there are many old Guy's men who would be willing to help towards the equipment of the first bacteriological laboratory which the Antarctic region will ever have seen.

It seems to me that if it were possible it would be an exceedingly nice thing if the laboratory were equipped by those who own Guy's as their alma mater. For this purpose about £100 would be needed. If this sum could not be obtained, any less sum would serve to complete the not too complete equipment which is to be allowed him.—I am, yours very truly,

WALTER C. C. PAKES.

Guy's Hospital, S.E., 29th January, 1901.

Suprarenal Capsule.

DEAR SIR,—I intend to publish a second paper on the use of the Suprarenal Capsule in organic heart disease.* Will you kindly ask the readers of your journal to send me the reports of their cases as follows:—

1. The condition of the heart and pulse, and also the pulse rate.
2. The effect on the heart and pulse, and also the pulse rate within ten minutes after the suprarenal powder, three grains, is chewed and swallowed without water, by the patient.—Yours truly, SAMUEL FLOERSHEIM, M.D.

218, East 46th Street,
New York, U.S.A., January 16th, 1901.

* For first paper see *New York Med. Jour.*, Oct. 6th, 1900, pp. 581-585.

The Out-Patients' Tea Fund.

CHRISTMAS, 1900.

DEAR SIR,—I enclose the balance sheet of the Out-Patients' Tea Fund, which I hope you will be good enough to put into the GAZETTE. It will be seen that there is a balance of £87 17s. 6d. At a meeting of the committee it was agreed to divide it as follows:—£30 to be carried forward for next year, £30 17s. 6d., being the proportion of the balance collected by myself and others at the Hospital for the patients, to go to the President of the Residents next Christmas for ward decorations and patients' dinner. The remaining £20 to be equally divided between the Charity Samaritan Fund and the Children's Home in connection with the Hospital.

As it is quite impossible to thank personally all those who so kindly helped to make the tea a success, I take this opportunity of most sincerely thanking them collectively.—I am, etc.,

E. W. GOBLE, Hon. Sec.

BALANCE SHEET.

RECEIPTS.	£	s.	d.
To Balance brought forward	30	0	0
„ Subscriptions	119	0	4
	£149	0	4

Dec. 31st, 1900. DISBURSEMENTS.	£	s.	d.
By Refreshments	30	1	5
„ Toys	9	19	11
„ Crackers and Lights, Punch and Judy Shows, Flags and Decorations	13	4	3
„ Printing and Stationery	1	4	3
„ Fees to Servants, Police, Postage, &c., ...	6	13	0
„ Balance in hand	87	17	6
	£149	0	4

January 1st, 1901.	£	s.	d.
To Balance brought forward	87	17	6

Audited and found correct,

Jan. 16th, 1901. CHAS. H. WELLS.

Appointments.

THE following gentlemen have been appointed members of the various Boards of Studies in connection with the Faculty of Medicine, University of London:—

Representing Chemistry.—Mr. C. E. Groves.
„ Physics.—Professor A. W. Reinold.
„ Other Subjects in Medical Curriculum.—Dr. W. Hale White.
„ Physiology.—Professor E. H. Starling.
„ Surgery.—Mr. W. H. A. Jacobson.
„ Pathology.—Dr. J. W. Washbourn.
„ Mental Diseases.—Dr. G. H. Savage.
„ Dentistry.—Mr. J. H. Badcock, Mr. W. A. Maggs.

Reviews.

The price of books submitted for review should in every case be stated.

Medical Electricity: A Practical Handbook for Students and Practitioners. By H. Lewis Jones, M.A., M.D., Fellow of the Royal College of Physicians, Medical Officer in charge of the Electrical Department in St. Bartholomew's Hospital. Being the third edition of "Medical Electricity," by W. E. Steavenson, M.D., and H. Lewis Jones, M.D. With illustrations. (London: H. K. Lewis, 136, Gower Street, W.C. 1900).

The third edition of this work is what it professes to be, a practical handbook for students and practitioners. The second edition has been carefully revised, and sixty fresh pages of new matter have been added.

A separate chapter is given to that most important subject, the utilisation of the currents from the main for medical and surgical purposes. There is a short description of the mode of production of these currents, and the differences between the continuous and the alternating currents are pointed out.

The uses to which these currents may be applied are summarised as follows:—

1. To illuminate cystoscope lamps, and other small lamp instruments.
2. To heat galvano-cautery.
3. To drive dental and other small motors.
4. To operate large induction coils for X-Ray work, ozonisers, etc., and medical coils.
5. To charge accumulators.
6. To replace medical batteries in the treatment of patients.

Practical hints and directions are also given for adapting the currents for the above-mentioned purposes.

The chapter on Statical Electricity has been brought up to date with a full description of the apparatus required and the operative procedures as carried out by Dr. Monell, of Brooklyn.

Special attention is paid to the uses of electric baths—a method of application which is much advocated by the author, especially in the treatment of infantile paralysis, when the lower limbs are affected. Writing of disorders of circulation, Dr. Lewis Jones says:—"For chilblains the arm bath or foot bath with induction coil is the most convenient domestic remedy, and succeeds in all but the most severe cases. I have used this mode of treatment in a number of cases, and have repeatedly seen the prompt disappearance of chilblains follow its use."

A short chapter on X-Ray work has been added, giving an outline of the methods and principles concerned in the work. An appendix has been added consisting of a list of places which have a public electric light supply, with details of the nature of the current supplied.

This book can be recommended with confidence as an up-to-date and practical exposition of what is known of the medical and surgical applications of electricity.

Sport.

Rugby Football.

GUY'S v. OLD LEYSIANS.

(GUY'S, 8 POINTS; OLD LEYSIANS, NIL).

Played at Eltham on January 5th, 1901. After several days of frost, there was some doubt whether the ground would be fit, but fortunately it was found to be just playable. Kicking-off up the hill, Guy's were unable to make any definite attack, and the game was of the most scrambling description. McEvedy, however, who throughout played well, eventually made a brilliant run and scored behind the posts; Harrison was successful with the kick. No further score resulted before half-time.

Soon after the beginning of the second spell, O'Brien arrived, and Milsom, who had done well at three-quarter, returned to the scrum. Being thus at full strength and playing downhill, Guy's did most of the attacking, and were time after time within an ace of scoring. Once, indeed, after a good bout of passing, McEvedy got over, but was pushed into touch in goal. Later on, however, Pye-Smith made a dodgy run through the whole of the opposing backs, and scored, but O'Brien failed in the kick. We continued to attack, but were unable to increase the score, and so won by 8 points (1 goal, 1 try) to nil. Team:—

GUY'S.—E. M. Harrison (back); S. P. Wadson, C. D. Pye-Smith, A. O'Brien, P. F. McEvedy (three-quarter backs); M. C. Wetherell, M. G. Louisson (half-backs); H. A. Cutler, A. H. E. Wall, R. C. Lawry, B. Glendinning, E. H. B. Milsom, H. S. French, A. R. Thompson, R. G. Anderson (forwards).

Birth.

McGREGOR.—On the 23rd January, at "Raeburn," South Queensferry, N.B., the wife of Surgeon G. McGregor, R.N., of a son.

Death.

HAUGH.—On December 28th, at Grange Road, Cambridge, James Haugh, F.R.C.S. Eng., J.P., in his 83rd year.

NOTICE TO CORRESPONDENTS.

The Editor wishes it to be understood that no communications can be inserted which are not guaranteed by the name of the sender. All articles must be written on one side of the paper only.

ED.—L. E. S.

Wilks' Pathological Anatomy.

Some spare sheets of this work have been kindly handed over to us by Sir Samuel Wilks to be bound in cloth and sold to Guy's men, past and present, at the low price of 2s. 6d. each. Any profit resulting from the sale is to be devoted to the Hospital. There are altogether about 100 copies, and they will be sold to the first 100 subscribers. Application should be made to the Editor of the GAZETTE or to the Librarian.

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Calendar of Coming Events.

February, 1901.

Sat. 16.—Messrs. Lucas and Lane's take-in; Drs., A. J. Beadel and A. C. Osburn; Cl., F. G. Gibson.
1 p.m., Clinical lecture by Dr. Taylor.
8 p.m., Meeting of the Debating Society.
G.H.R.F.C., I., Lennox, home.
II., Lennox, away.
IV., Old Alleynians III., away.
G.H.A.F.C. I., Reigate Priory, away.
II., Kenley (reserves), home.

Mon. 18.—1.15 p.m., Clinical lecture by Mr. Symonds.

Wed. 20.—1.30 p.m., Clinical lecture by Mr. Jacobson.
G.H.R.F.C., I., R.I.E.C., away.

Thur. 21.—Messrs. Golding-Bird and Dunn's take-in; Drs., T. G. Miles and W. A. G. Stevens; Cl., J. M. Butler.

Sat. 23.—1 p.m., Clinical lecture by Dr. Taylor.
8 p.m., Meeting of the Physical Society.
G.H.R.F.C., I., Croydon, away.
II., R.I.E.C., away.
III., King's College II., home.
IV., Catford Bridge III., away.
G.H.A.F.C, I., Tunbridge Wells, away.
II., St. Thomas's 2nd XI., away.

Mon. 25.—1.15 p.m., Clinical lecture by Mr. Targett.

Wed. 27.—1.30 p.m., Clinical lecture by Mr. Jacobson.

Thur. 28.—Messrs. Jacobson and Fripp's take-in; Drs., F. L. Thomas and W. Collins Lewis.

March.

Fri. 1.—April Appointment List opened.

Sat. 2.—1 p.m., Clinical lecture by Dr. Taylor.
G.H.R.F.C., I., Marlboro' Nomads, away.
II., Polytechnic, away.
G.H.A.F.C., I., Surbiton Hill, away.
II., Surbiton Hill 2nd XI., home.

Guy's Hospital Gazette,

FEBRUARY 16, 1901.

Acute Abdominal Lesions.

CLINICAL LECTURE BY DR. FAWCETT.

January 19th, 1901.

GENTLEMEN,—The case I wish to bring before you to-day is one which we do not often meet with in the medical wards, namely, a ruptured tubal gestation. The great interest of the case lies in that it presented itself to us as one of a more general type, such as from a perforation of a hollow viscus, and that the special signs of the origin of the condition were absent, or, at any rate, so ill-marked as to draw away our attention from any such origin rather than to attract us to it. I will read you the history and notes of the case made for me by Mr. J. A. Butler:—

Previous history.—The patient is twenty-nine years old. She was admitted on January 14th, 1901. She is married and has been pregnant five times. The first pregnancy ended in a miscarriage. The two younger children are healthy, and are five and three years old respectively. Since the last pregnancy the periods have been regular, occurring at intervals of a month, the flow usually lasting a week. She states she has sometimes "lost" for a day or two after the regular flow has ceased. The last menstrual period commenced seven days prior to admission, and was stated to have lasted for a week and to have ceased at the time of admission.

History of the present attack.—Patient was suddenly taken ill at eleven p.m. on the night before admission with severe abdominal pain and vomiting. The vomit was of a brownish-black colour, and after vomiting the patient fainted. She had three or four "fainting" attacks, one after the other, and when she recovered from the last one she found "she had lost her sight." The bowels were open four times during the night, the motions were black in colour and very offensive in odour.

The vomiting continued all the night of January 13th and up till nine a.m. on January 14th. The last meal prior to the attack was at mid-day on January 13th, and up till the time of admission the patient had had no solid food.

On admission.—Pulse 102, temperature 98, respiration 24. She was somewhat blanched, but not markedly so. She complained of acute pain along the right side of the abdomen, in the epigastrium, and around the umbilicus; also of pains in her shoulders, especially the left. When the pain first appeared it was in the neighbourhood of the umbilicus and an inch and a half below it. She had a collapsed appearance with sunken eyes and dark rings beneath them. The pulse was small but regular. The abdomen was somewhat distended, and especially so in the lower half. It did not move at all with respiration. On palpation it was tender all over, but, if anything, more so in the flanks than elsewhere. Rigidity was also general. Percussion gave a resonant note everywhere. The liver dulness was normal. About half an hour later the abdomen was more supple and moved slightly. The other signs and symptoms, however, persisted. On vaginal examination there was found to be bright red blood on the finger on withdrawal, but there was nothing else to be made out, neither tumour nor tenderness.

Nothing abnormal could be felt per rectum.

Remarks.—It was quite clear that we had to deal with a case of severe collapse, of abdominal origin, such as might be caused by the perforation of a hollow viscus, or due to some internal hæmorrhage. The signs and symptoms which pointed to this were the—

1. Sudden onset, with severe abdominal pain and vomiting, which persisted.

2. The immobility, general tenderness, and distension of the abdomen.

3. The feeble pulse with increase of pulse rate.

4. The appearance of collapse.

Such a group of symptoms at once suggested that operative interference might be immediately necessary, whatever might be the cause. It is in such cases sometimes extremely difficult to determine, even with comparative exactitude, the origin of a lesion associated with such acute symptoms and without any previous history of illness of any kind which may help us to locate the cause.

Our treatment as a result of this is in many of these cases experimental in the true sense of the word.

Sir Michael Foster, in an article in the present number of the *Nineteenth Century*, puts this point so clearly that I may be perhaps allowed to actually quote from his article, because it is to such cases as these that his statements are specially applicable.

He says, "In every case of treatment of the sick there is a factor of uncertainty, and this factor, by which each act of the healer becomes an experiment, varies widely in different cases. It may be insignificant—it can never be wholly absent—or it may be considerable. How far the healer in any particular case ought to go in the direction of uncertainty must depend on the special circumstances of the case, and must be determined by *one* consideration alone—the welfare of the patient. Judged by this—by the welfare of the patient—it may in one case become the duty of the healer to plunge into the unknown, guided by the slenderest clue, in another case he would be blamed if he swerved ever so little from the trodden path."

With symptoms as in this case the evidence was strongly in favour of an abdominal lesion, which early operation might relieve, even though we were unable to determine at the time the exact lesion. The few cases of patients whose abdomens you will open and find nothing, do not in any way alter the fact that, although it is sometimes impossible to decide for certain, yet that if you regard the case as serious, and its symptoms as significant, as we did here, you are bound, for the welfare of your patient, to experiment, viz., to recommend operation as a means of finding out if he or she can be relieved. It is only in the early stages of such cases that there is any hope of success. If you find nothing you can relieve, well, you must trust to your surgeon and his aseptic surgery, which render such an exploratory operation of far less danger than in days gone by.

I have dealt with the general symptoms and principles which determine the course to be followed, but there is still another duty before

you. You must, if possible, decide upon the origin of the condition, because by so doing you can help the surgeon in attacking the lesion from the most advantageous position. The difficulty of doing this is, however, often increased by the fact that on arrival at the hospital the patients are so ill that they are unable to give a very satisfactory account of themselves.

Now, the history of this case and the results of our examination did not point to any pelvic lesion. I will detail to you the usual symptoms of a case of "ruptured tubal gestation." The symptoms of internal hæmorrhage, viz., pallor, collapse, fainting and rapid pulse, are the most important and are usually present; the sudden onset, with severe abdominal pain, fainting and vomiting, are generally so. But any or all of these symptoms may occur with internal hæmorrhage from any source. There is frequently, however, in these cases a history of irregular menstruation, of menstruation being delayed, or of a discharge of blood per vaginam for some days which was not like that of an ordinary period, of amenorrhœa, or of a continuous sanguinous discharge from the beginning of pregnancy; sometimes an ill-defined, boggy swelling is to be felt in Douglas' pouch from collection of blood clot there.

Special attention was paid by Mr. Butler to the menstrual history. Mr. Fripp also, when called in, asked almost immediately about it, but with the history I read to you of perfect regularity, and in the absence of anything to be felt in the pelvis, we came to the conclusion that the case was probably not of pelvic origin, although in the light of later discovery we should perhaps have paid more attention to the fact that there was, on admission, a bloody discharge from the vagina, although the patient said menstruation had ceased.

Mr. Fripp noted that in the left flank the note was not so good as in the right. He thought it distinctly impaired, and this impairment might have been due to blood or to some other fluid in the peritoneum. The chief interest, however, of the case to us is that we must remember that a patient with such symptoms as I have told you of may be suffering from an acute pelvic lesion, of the origin of which there may be no, or very few, signs.

The conditions which suggested themselves to us, were—

1. The rupture of a gastric or duodenal ulcer.
2. Rupture of an abdominal aneurism.
3. Acute pancreatitis.
4. Acute appendicitis with perforation.
5. Intestinal or other forms of colic, especially that due to lead.
6. Acute pulmonary disease.
7. Severe gastralgia.

1. Of all of these the *perforation of a gastric ulcer* seemed to me the most likely, although the symptoms and signs were not altogether typical of such. Let us for a moment consider such a case.

You may remember that soon after the onset of the abdominal pain and collapse the patient fainted; also that the vomiting was severe, that there was a history of black vomit and the passage of black stools.

In many of these cases we obtain a *previous history* of gastric pain, of vomiting, and of hæmatemesis, but there are many instances where no such history is obtainable, but the patient is in apparently perfect health.

Vomiting is said to be frequently absent, or, if it occurs at first, to soon cease. This character, however, is not so definite as is stated in some text books, and indeed is by no means always the case. We have quite recently had a patient in Clinical ward in whom vomiting occurred first some little time after the acute onset when food was given, but not again till sixty hours later, when it became very marked and persistent. The vomiting is not a merely mechanical process. It does not follow that because there is a hole in the stomach it is easier for the food to go out that way than by the mouth. This symptom is often due to irritation of the peritoneum, just as in acute intestinal obstruction.

However, in the patient I am talking of today, the vomiting was certainly more marked than usual in a perforated gastric ulcer, and indeed we regarded it as a doubtful feature in the diagnosis, but not sufficiently so to lay great stress upon it.

Pain is usually of a sudden and agonizing character, is first felt in the epigastrium, then all over the abdomen, and is often paroxysmal in the early stages. This pain is accompanied by tenderness on palpation, which is rendered worse on pressure. The pain and tenderness are often most marked in the epigastric region. Here, again, we are constantly meeting with exceptions, as in a case that I had in Clinical ward in the summer months, where the pain was referred at first to a point three inches above the umbilicus, but later to the right iliac fossa, and there are cases on record in which

the pain has been noted to simulate that of an appendicitis or a ruptured pyosalpinx.

The *condition of the abdomen* is the next point. In a perforation it is usually distended and rigid. That was so in this case, but the distension was more marked in the lower half. It is very tender generally, but often more so in the epigastrium.

In the case I have read to you the tenderness, although general, was most marked in the flanks. This was another feature which made the diagnosis doubtful. On percussion the abdomen may be found to be tympanitic all over, with absence or diminution of the liver dulness. The liver dulness was normal in this case, but that is often so in cases of perforated gastric ulcer, as the stomach may be attached on to the liver by adhesions, and also because the amount of gas necessary to keep the liver away from the surface must be great. On the other hand, the dulness may be absent without perforation, when coils of the intestine get between the liver and the diaphragm.

Dulness in the lower and lateral portions of the abdomen is a very rare feature. When it is present it is due either to fluid collecting there, or later in association with peritonitis. As you see, it was unfortunate in some ways that we came to the conclusion the case was one of perforating ulcer, because it decided Mr. Fripp to open the abdomen in the middle line above the umbilicus, and as he did not find the cause there he had to extend his incision very considerably to investigate the lower half of the abdomen.

A perforated duodenal ulcer you would probably not be able to tell from a gastric ulcer for the symptoms are much the same, but if they occurred in a man and the vomiting was persistent the possibility of its being duodenal, and not gastric, should suggest itself to you, for in a perforated duodenal ulcer it is said that the vomiting is more persistent on the average than in the gastric cases.

Now let us proceed to consider shortly the other conditions I have enumerated.

2. A *ruptured abdominal aneurism* may give rise to symptoms of the same type as the above-mentioned, but a history of pain of very intense and persistent type is almost always obtainable.

The symptoms and signs of abdominal aneurism are sometimes so latent as to have led to a mistaken diagnosis of gastric ulcer, of lead colic, of gastralgia, or even hysteria, and I suppose there is no class of case in which such mistakes have so often been made. However, the question never arose in this case as the patient, besides being a woman, had had no symptoms whatever previously.

3. *Acute pancreatitis* is very difficult indeed to distinguish. The patient has generally been quite well previously, but is suddenly attacked with acute epigastric pain. The vomiting is copious, and may be constant or repeated at intervals, and constipation be present. There is at first little distension of the abdomen, although later it becomes so, and this, with the acute onset, will help us in diagnosing it from an acute intestinal obstruction. The tenderness of the abdomen as a whole is not so marked as in cases of perforation, but cases are described where it was most evident over certain points, these points representing areas of fat necrosis. The foregoing only represents the condition found in the early stages, but in the absence of any history, of previous gastric symptoms, of jaundice, or of paroxysmal attacks of colic, these symptoms would suggest the possibility of a pancreatitis, but not with sufficient certainty to justify us in withholding an exploratory operation.

In the case we are dealing with to-day the first thing that was seen on opening the abdomen was the welling up of a bloody fluid, and as no perforation of the stomach or duodenum could be found, an acute pancreatitis was suggested. This condition is often associated with an exudation of bloody fluid into the peritoneal cavity. However, examination showed that the pancreas and its neighbourhood were free from disease.

4. *A perforated appendix.* — The form of appendicitis which leads to difficulty in diagnosis is a very acute variety, viz., those in which the initial symptoms are rapidly followed by evidence of an acute general peritonitis, and in a large number of such the attacks are the first of their kind. However, there may be sufficient evidence of localization to suggest the appendix, and the temperature generally runs up quickly, whereas in cases of hæmorrhage or perforated gastric ulcer it is subnormal at first and becomes only raised later with onset of peritonitis. In the absence of these signs it is impossible to determine the site of perforation. When you remember that in these very acute cases death may result in thirty-six to forty-eight hours, you will readily understand how difficult it may be to diagnose the origin of the condition with any approach to certainty.

5. *Colic* of any kind, especially intestinal. You may think it is not very probable that you will mistake a case of perforation for one of

colic, but in some cases, in the early and therefore most important, stages it is the most difficult point in the differential diagnosis. I remember a clinical lecture of Dr. Shaw's in which he told how an old lady with a "blue line" came in to a hospital—"not Guy's" as he said—with a fifth attack of "colic" and in which the constipation was most difficult to overcome. She died, and a strangulated femoral hernia was found post-mortem. I remind you of this example to impress upon you the importance of always looking at the gums in a case, but at the same time if you *do* find a "blue line" not to forget that if the attack of abdominal pain be very severe, and the other signs and symptoms are not quite like a "lead colic," you must investigate further to see if there be not some additional, or other, cause for so marked an obstruction. In all these "colics" it is chiefly the character, distribution and severity of the pain which help one. The general condition of the patient is not so serious as in cases of perforation or of profuse internal hæmorrhage.

6. Another point that I wish to impress upon you is the necessity of always examining *the chest* and *the knee-jerks*. I will give you two examples. One was a case in Clinical. The man was admitted in a collapsed condition suffering from acute abdominal pain. He was thought to have a perforated gastric ulcer. For some reason an operation was postponed, and before it was performed the chest was examined again by the physician, who then detected evidence of an early lobar pneumonia, from which the patient made a good recovery without the aid of the surgeon.

The second example is that of a man who had had severe recurrent attacks of paroxysmal abdominal pain with vomiting and constipation, and a good deal of collapse but without much distension. He was thought at first to be suffering from some form of intestinal obstruction, but the knee-jerks were absent and other signs showed that the case was one of locomotor ataxy with severe gastric crises.

7. The last class of case I wish to mention to you to-day is one where the gastric symptoms may be so severe as to lead to a mistaken diagnosis of gastric perforation. I refer to what may be called, for want of a better name, cases of severe *gastralgia*.

I had formerly at the Royal Free Hospital as an out-patient a thin, feebly-built, nervous woman who always had pain "over her stomach," and severe pain apparently, too. It was much intensified after food, but was always present more or less. She had had it "for years," and was at the time I saw her about thirty-five years of age. She suffered with vomiting from time to time. The abdomen was retracted and always tender on pressure, tender all over, but more so in the epigastrium; it moved very little with respiration. She had never had any hæmatemesis.

After watching her for many months I came to the conclusion that she had no ulcer and that it was a case of severe gastralgia. One day she came in to see me; the pain was very intense, much more so than usual and it had come on quite suddenly while waiting in the out-patient room. The abdomen was even more rigid, tender, and immobile than usual, the pulse was very small and rapid. She looked very ill, could not answer questions, was holding her hand to her abdomen, and I came to the conclusion that, after all, she must have an ulcer which had now perforated. However, when we got her warm in bed, and I had called in the surgeon to look at her with me, she told us she had had as severe attacks as this before, and knowing her to be a highly neurotic woman I decided to watch her for a couple of hours. In that time she became distinctly better in all ways and recovered from her acute attack, but only to relapse into her former chronic state.

Now, a patient with symptoms such as this one presented may very well have her abdomen opened, and I remember such a case being operated upon not only once, but twice, in Clinical ward some few years ago. It was only because I knew this patient so well that we postponed operation, and unless I had been in that position I should certainly not have felt justified in so doing. However, the important point for you to bear in mind is this, that comparatively few of the "nervous dyspepsias," as they are called, present symptoms so acute as the above, but if they do you must first consider the possibility of your previous diagnosis having been a mistaken one, and if you then decide after careful consideration, on recommending operation, even though it should turn out that there is no perforation, you may gain some comfort from the knowledge that such mistakes have been made before and probably will again, and that in these days of aseptic surgery you should not have done your patient any serious injury.

The fact remains that in most of the patients who present signs and symptoms such as I read to you of the case now in Clinical ward, you will be right in recommending an exploratory operation.

Vote of Condolence to His Majesty King Edward VII.

Upon taking the chair at a General Court of Governors held on Friday, February 1st, 1901, the Treasurer moved the following vote of condolence upon the death of Her late Majesty.

"MOST GRACIOUS SOVEREIGN:—

"We, your Majesty's loving subjects, the Governors of the Hospital founded at the sole costs and charges of Thomas Guy, Esq., desire to approach your Majesty with a deep sense of the loss which the nation has sustained through the lamented death of our beloved Queen.

"We will not dwell upon the many eminent qualities which distinguished the life of that noble Monarch.

"As the Managers of a large and ancient Hospital, we would rather cherish her memory in connection with the warm and liberal support which it was her royal pleasure habitually to afford to the charitable institutions of this country, and with the active benevolence which led her to devote a large part of her attention to their welfare.

"Whilst begging your Majesty to accept the humble recognition of the many virtues of our late most Gracious and honoured Queen, we crave leave to offer at the same time our respectful and heartfelt condolence with your Majesty under your present heavy affliction, together with the assurance of our loyal homage and attachment to your Majesty's person.

"Further, we would crave permission to offer an expression of our sincere and hearty congratulation upon your Majesty's accession to the throne of your ancestors.

"We trust that, in health and long life, your Majesty may be preserved to reign over a prosperous and united Empire, and, that this great charitable Institution may have in the future, as it has done in the past, the gracious honour of your Majesty's countenance and support in the noble work it is called upon to fulfil."

Resolved that the above vote of condolence to His Majesty be, and is hereby adopted, that the same be engrossed, and signed by the Treasurer and the Clerk of the Hospital, and forwarded to the private Secretary to the King for presentation to His Majesty.

Royal College of Physicians.

1901.

LECTURES OF THE PRESENT YEAR

Will be delivered at the College, Pall Mall East, on each of the following Tuesdays and Thursdays, at 5 o'clock.

MILROY LECTURES.—February 28th, March 5th, 7th.—Dr. J. F. J. Sykes, "The influence of the dwelling upon health."

GOULSTONIAN LECTURES.—March 12th, 14th, 19th.—Dr. H. Head, "On certain Mental States associated with Visceral Disease in the Sane."

LUMLEIAN LECTURES.—March 21st, 26th, 28th.—Dr. J. F. Payne, "On Cancer, especially of the Internal Organs."

(By order of the President),
WILLIAM FLEMING, Bedell.

Jacksonian Epilepsy.

A paper read before the Physical Society on Saturday, February 9th, by Mr. N. BLAKE ODGERS.

MR. PRESIDENT AND GENTLEMEN,—At the outset I should mention that this paper should be entitled "focal" rather than Jacksonian epilepsy, the former term implying simply that the fit is due to the discharge of a definite cortical centre, whilst the latter is apparently reserved for those cases where the discharge is caused by a macroscopic irritant.

While the recognition of epilepsy is as old as the hills—Mahomet suffered from the "falling sickness"—it is curious that it is difficult to find any early record of these partial convulsions. As far as I can discover, a Dr. Prichard, of Bristol, first recognised and described under the name of "local convulsions" three typical cases of focal epilepsy in 1822. In 1828 Dr. Abercombie separated "a class of certain cases disinguished by convulsions without any affection of the senses." In one of such cases he found a tumour on the surface of the hemisphere of the opposite side to that on which the convulsions occurred; in another a portion of the opposite cortex was indurated. About the same time Bravais introduced the name of hemiplegic epilepsy for these cases, considering that the proximal cause of the paroxysm was an abnormally high condition of some cells resulting in occasional discharges.

But, while others had noticed these partial epilepsies, and in some cases the local cortical lesions associated with them, it was left to Dr. Hughlings Jackson in 1868 to see in these the cause and effect and to deduce from a number of such observations a doctrine of the localisation of cortical centres.

The physiological teaching of the time, following Flourens, regarded the cortex as the seat of the sensations, and had proved to its own satisfaction its inexcitability to artificial stimuli, and it was out of regard to this belief that Dr. Hughlings Jackson suggested first that the corpus striatum was the locality of the irritation and that cortical lesions merely acted by the pressure they exerted on convolutions adjacent to that body. One of the first cases he published illustrates this. An old woman fell down stairs and started to have fits confined to the right arm and the right cheek two days later. The post-mortem showed blood beneath the arachnoid, chiefly in one spot over the frontal convolutions, exerting, he explains, pressure on the corpus striatum, which was otherwise undamaged; in fact he originally called this condition "corpus striatum epilepsy."

It was some two years later that the physiological proof afforded by Fritsch and Hitzig, followed by the corroboration of a host of other observers, established beyond all doubt the excitability of the cortex and the localisation there of different movements, proving *ipso facto*, that it was in some cortical lesion that the cause of these partial epilepsies must be sought.

Before proceeding further, it would be well, I think, to dwell for a moment on some physiological considerations, putting these in the form of premises:—

Firstly: It is "movements" and not individual muscles which find a place in the cortical representation.

Secondly: While a certain movement is primarily localised in a definite centre, other movements are secondarily represented there. Thus, if the hallux centre is stimulated in a monkey, the weakest current gives simply a flexion of the great toe; as the current is increased in strength, movements of the whole leg will be evoked, then of the arm, and then of the face; in fact, a whole march of movements occurs, and ultimately a bilateral convulsion is produced. That this is not due to simple spread of the excitation to neighbouring centres is shown by Beevor and Horsley, who found that when the hallux centre is stimulated in the ourang, the hip moves before the knee, although anatomically the knee centre is nearer to the hallux centre than is that of the hip. Again, the centres have been isolated from each other (Unverricht) and yet the "march" has not been interfered with. There is, in fact, a physiological localisation as well as an anatomical. Herein lies the true explanation of the march of movements which characterises Jacksonian epilepsies, and also the transitory character of the paralysis, often observed after the excision of a cortical centre.

Thirdly: These cortical centres are sensori-motor in function; this, although still disputed by some, seems to be the orthodox view at the present time. On this view the explanation of the sensory aura which accompanies the typical fit is an easy matter. It is obvious, too, that stimulation of the sensory side will fire off the centre. If the cortex be rendered hyperexcitable through exposure or absinthe, or through a hemisection of the dorsal cord, or through electrical or chemical stimulation, the slightest peripheral irritation will produce a Jacksonian attack. Further, it is sensory impulses that are constantly keeping the centre in its normal state of excitability. Cut the posterior roots of the brachial plexus on one side in a monkey, and the corresponding cortex is far less excitable. If the sensory impulses are abnormally intense, they will of themselves produce an epileptic attack. Thus, Brown-Séquard wounded a rabbit's sciatic nerve; fits resulted, beginning in the thigh on this side. This explains a whole class of epilepsies, often focal in character, caused by some peripheral irritant.

Lastly: The motor centres can be reflexly stimulated through the centres for the special senses. Stimulation of the occipital lobes will produce movements of the eyes.

To turn now to the character of the fits themselves. They start with some aura which may be simply a tingling sensation in the extremity where the fits commence, or there may be intense pain. These auræ can oftentimes be stopped and the fit thus prevented, by tying something round the limb higher up. In one case the aura occurred on the opposite side to that of the fit. Thus, there was a man under Mr. Lane, in 1897, who had fits which began on the left side of the face, but an aura on the right side; the attack could be prevented by rubbing this cheek hard. In another case, published by Dr. Gowers, the aura began in the left wrist; a blister was applied here and the aura was thus transferred to the right wrist. Or the sensations may be visceral; one man feels sick and giddy, another desires to defæcate. Others are warned of the onset of an attack by flashes of light, colours before the eyes, a stench in the nose, or a noise in the ear. A psychical aura is not uncommon. A man, who was in Stephen before Christmas had an aura in which a certain scene in India presented itself. The aura, whatever it is, is constant in its character.

This is succeeded by an initial or "signal" movement, involving the action of some definite group of muscles. If the spasm involves the leg first, it will start most commonly in the great toe; if the arm, in the index finger, in the thumb or in both; if the face, near the corner of the mouth, in the tongue, or in both eyelids. In certain cases individual muscles appear to be the starting point. In a case under Mr. Davies-Colley, in 1895, it was the left sterno-mastoid; in another, the left platysma, in a third, recorded by Dr. Byrom Bramwell, it was either the biceps, deltoid or trapezius.

Following the initial movement the march commences. This may stop at a monospasm, involving a part or the whole of one extremity; it may go on to hemispasm, or result finally in a general epileptic fit. If the face is first affected, the arm will be next attacked and then the leg; if the fit commences in the arm, it goes up the arm and down the leg; if in the leg, up the leg and down the arm.

The usual explanation of the march relies on the anatomical disposition of the centres, the excitatory condition, which starts, say in the centre for the face spreading to the adjacent arm centre before it reaches that of the leg, which is further off. If this were correct, it were difficult to suppose that ablation of a single cortical centre could cure fits, which involve ultimately the whole of one side of the body; if neighbouring centres were excited by direct spread of the irritation, surely they could scarcely escape permanent damage.

As the march proceeds so the initial movement increases and does not subside. Thus, if x, y, z, represent the movements of the face, arm, and leg, and the fit starts in the face, the march may be thus represented, x, x^2y, x^3y^2z. In some cases after rapidly recurring convulsions, the part first affected in the earlier attacks ceases to take any share in the later ones, the fits thus beginning at what would be a later stage of the former seizures.

Consciousness is eventually lost in most of the severe attacks, but the difference between these fits and true epilepsy lies in the later period at which this occurs. The fit is well on its way before the patient becomes unconscious.

Immediately after the fit there is always a certain amount of paralysis, which is greatest in the part first and most convulsed and which may vary much in degree and in range, from inability to perform the finer movements to an actual hemiplegia. This is not due, as was once supposed, either to congestion or to blood extravasation, but rather to the discharged cells being run down. The knee-jerk is increased on the same side, ankle clonus is present with the extensor plantar reflex.

The fits vary as much in their frequency as they do in their intensity; in some cases they may occur twice a year; on the other hand, Dr. Hughlings Jackson mentions a case who had 1945 fits in a fortnight, and Mr. Treves publishes that of a man with 2870 fits in thirteen days. They certainly increase in number as the disease progresses, ending finally in a status epilepticus.

But these fits are only a symptom indicative of local cortical irritation. In essaying to classify the conditions which may give rise to them, it were well, perhaps, to consider first those in which there is some gross irritant, *i.e.*, true case of Jacksonian epilepsy. Such a gross irritant may be either (*a*) peripheral or (*b*) central.

(*a*) While these may more often give rise to attacks of regular traumatic epilepsy, there are several cases of the Jacksonian variety recorded, which had their origin in the implication of a peripheral nerve. For instance, a man receives a shot which grazes his left little finger; from this time Jacksonian fits commence and are cured by an amputation of the two terminal phalanges. Similarly a neuroma in the right hand was responsible for a fit wholly confined to that side.

Cicatrices on the scalp may likewise involve nerves and produce in this way a reflex epilepsy absolutely comparable to that produced by Brown-Séquard on the rabbit's sciatic.

In one case the peripheral irritant was apparently visceral in origin. A man, aged fifty-two, the subject of chronic indigestion, commenced to have Jacksonian attacks, and no other cause than this was found for them.

(*b*) It is "remarkable," writes Dr. Hughlings Jackson, "how many excellent histories of cases of diseases of the nervous system exist without autopsies, and how many autopsies without histories." This remark is very applicable to many cases of Jacksonian epilepsy. In fully a half of the forty-two cases of these convulsions in the Hospital Reports there is nothing but a vague history of injury, no scar and no depression being seen, while neither operation nor post-mortem afforded an opportunity of explanation; conversely, there is no specimen, so far as I could ascertain, in the museum with any clear history of Jacksonian fits attached thereto.

(1) Taking conditions of the bones of the cranium first. A common cause of these fits is a depressed fracture. This may cause an obvious depression and be accompanied by a painful scar, or may amount simply to a splinter of bone. Dr. Byrom Bramwell records one case, where a spicule of bone one-third of an inch long pressed on and irritated a small area of the motor cortex; in another case mentioned in Bergmann's "Diseases of the Brain," a splinter of bone was found 2 cms. deep in the centre for the left leg.

(2) Or the bone may be thickened and adherent to the scar, or to the dura, or to both. In 1890 Mr. Lane performed the first operation for a case of Jacksonian epilepsy in this hospital. The patient was under Dr. Hale White, and presented no obvious scar nor depression. He was trephined, and a disc of bone three-quarters of an inch thick removed, the dura beneath being white and opaque. After the operation he had no fits and no headache. In a case under Dr. Taylor, in 1890, who had typical fits affecting the left hand and leg, all that was found post-mortem was old syphilitic osteitis of the right parietal bone.

(3) A local meningitis, of whatever nature, may cause typical focal epilepsy. In a case of Dr. Dreschfeld's the convulsions started in the left hand and were limited to the left arm. The dura mater was found adherent to the cortex over the greater part of the right ascending parietal convolution. In a second patient whose fits similarly commenced in the left arm and spread to the face, the pia was adherent at the junction of the middle and lower thirds of the right Rolandic area.

Jacksonian fits may be the first symptom of a tubercular meningitis. A man working in a field had a sudden attack of focal epilepsy, and continued to have them for several days before his temperature rose and he developed any further symptoms. A localised collection of tubercles on the motor cortex was probably the cause here.

Gummata, which are nearly always attached to the meninges, are naturally a common cause: in fact, at one time syphilitic and Jacksonian epilepsy were synonymous terms. For instance, a man with a left hemiplegia and with Jacksonian epilepsy on this side, had a gumma in the second right frontal convolution irritating the adjacent motor cortex.

(4) I have found three cases where thrombosis of the cerebral veins over the motor area and the consequent hyperæmia of the adjacent cortex, gave rise to focal fits.

A girl of thirteen, with well marked mitral disease, suddenly had an attack of shaking in the left hand, spreading up the arm and reaching the left side of the face. After the fit the left arm was quite powerless and anæsthesic. The post-mortem revealed the right lateral, superior longitudinal and superior petrosal sinuses all distended with clot; the cerebral veins on this side were engorged, especially one passing just posterior to the right ascending parietal convolution.

(5) In five cases of which I found record, intracranial hæmorrhage was the cause.

A boy under Mr. MacEwen in 1879, had a fall six days previously; he developed fits which started with twitching of the left side of the face, and then affected the left arm. He was trephined over the appropriate area, and a fissured fracture accompanied by a subdural hæmorrhage was discovered.

In a case published by Dr. Gowers, it was the softening, consequent upon a cerebral hæmorrhage that was responsible for the fits. A girl, æt. 8, who had had Bright's disease for two months, twelve hours before she died developed fits which occurred every ten or fifteen minutes and started in both occipito-frontales, then affected the left side of the face, then the left arm. An autopsy showed an old clot of several weeks' duration above the right ventricle, the size of a walnut, while from this the softening had reached the cortex and over the right parietal and occipital lobes there were minute extravasations of blood beneath the pia.

Secondary hæmorrhage in cases of pachymeningitis has also been the cause of the fits.

(6) Aneurism of the middle cerebral artery can also produce these convulsions. Dr. Hughlings Jackson records one case where there was an aneurism of the artery on the right side and the fit was confined wholly to the corresponding half of the body.

(7) There is a group of cases where nothing was found to account for the fits except an increase in the intracranial tension. That such an increase takes place during the fits has been experimentally proved; it may rise to as much as 500 mm. of Hg., while 35 mm. is the normal tension.

Kocher has published the case of a boy in which fits that occurred as often as fifty times in the day, stopped directly the cerebro-spinal fluid was allowed free drainage: after the drainage tube was removed they recommenced, and were only finally checked by injecting iodoform into the ventricle to prevent the excessive secretion.

This abnormal tension is probably the cause in many cases which derive benefit from, or are even cured by trephining and opening the dura, or puncturing the ventricles.

We come next to morbid conditions of the cortex which have been found in these cases.

(1). Congestion.—In the case of a woman suffering from Bright's disease, who had typically Jacksonian attacks which commenced in the right arm and involved the whole of the right side of the body, nothing was found except a congested condition of the brain, especially at the top of the motor area on the left side.

(2). Local inflammation of the grey matter.—MM. Landouzy and Siredey recorded a case in 1884 of a woman who had Jacksonian fits commencing in the fingers of the left hand and involving the face; this was followed by a monoplegia of this arm. Her temperature rose to 104° F. before she died, and at the post-mortem nothing was found but a small patch of pale coloration on the lower portion of the parietal region on the right side.

(3). Localised cerebral abscesses were the cause in two cases. One is among the first recorded by Hitzig in support of cortical localisation. A soldier in the Franco-Prussian War received a bullet-wound on the right side of the head, and subsequently developed convulsions of the left side of the face, which spread to some extent to the left hand. At the autopsy an abscess was found in the lower extremity of the right ascending frontal convolution. Mr. Davies-Colley operated on a similar case, in which, however, the abscess was not quite so localised.

(4). Scars on the brain cortex, which may be the result of trauma or of an absorbed gumma.

In 1888 Mr. Victor Horsley published the case of a man aged 22, who, when seven years old, had a depressed comminuted fracture, which resulted in a hernia cerebri. He completely recovered from this, but when 18, began to have fits, which commenced in the right lower limb, and spread to the right arm. A vascular scar was found at the operation at the posterior end of the superior frontal sulcus on the left side. This was excised and the fits ceased.

Often these scars are cystic in character. Bergmann operated on a man, on the left side of whose head a great block of wood had fallen sixteen years previously. He had Jacksonian epilepsy, commencing in the right hand. At the operation, an old depressed fracture was found, and on the cortex of the brain was a corresponding depression filled with cystic connective tissue, from which cerebrospinal fluid escaped.

(5). Or definite cysts may result from injury and cause convulsions. Mr. MacEwen in 1888 operated on a man of 22 who had 100 fits a day, limited to the right side of the face, tongue and platysma. A cyst was found in the lower part of the ascending frontal lobe. Such another case is that of a boy who at the beginning of last year was in Luke ward under Mr. Golding-Bird. He had Jacksonian fits which were caused by a large cyst of the arachnoid on the left side of the brain, the result, it was thought, of an injury received many years previously.

These scars and cysts, the results of old traumatism, may oftentimes be the cause of those fits which come on a long time after the injury. Such fits occured in one case under Mr. Golding-Bird twelve or thirteen years after a fall; longer intervals may elapse where a slow sclerosis of the cortex is set up by the injury, which ultimately produces Jacksonian fits.

(To be concluded.)

Antarctic Expedition Bacteriological Equipment Fund.

	£	s.	d.
Mr. W. C. C. Pakes	1	1	0
„ J. W. H. Eyre	1	1	0
„ C. H. Wells	1	1	0
„ J. T. G. Sichel	0	10	0
„ R. M. Beaton	1	1	0
„ H. de R. Morgan	1	1	0
„ L. A. Dunn	1	1	0
„ T. L. Eastes	1	1	0
	£7	17	0

Hospital News.

CLASSIFIED LIST OF CASES.

In the Surgical Wards.

CASES UNDER MR. HOWSE.

ASTLEY COOPER.	5.	Depressed fracture of skull. Trephined.
	11.	Fractured base.
	16.	Dislocated radius.
	17.	Fractured femur.
	24.	Concussion.
	29.	Divided temporal artery.
JOB	10.	Acute infective periostitis.
LYDIA	9.	Strangulated femoral hernia.
	13.	Abdominal pain. ? Cause.
	18.	Inguinal hernia. Radical operation.

CASES UNDER MR. LUCAS.

LAZARUS	6.	? Osteo-arthritis of elbow. Ankylosis.
	14.	Tuberculous disease of hip.
	19.	Inguinal hernia. Radical operation.
MARTHA	5.	Tuberculous ostitis of great trochanter.

CASES UNDER MR. GOLDING-BIRD.

CHARITY	2.	Scoliosis.
	9.	Irreducible femoral hernia.
	11.	Stricture of rectum.
LUKE	8.	Chronic cervical abscess.
	9.	Phimosis. Circumcision.
	16.	Chronic synovitis of knee.
	18.	Thyro-glossal cyst.

CASES UNDER MR. JACOBSON.

NAAMAN	4.	Varicocele.
	18.	Phimosis. Circumcision.

CASES UNDER MR. SYMONDS.

JOB	14.	Epithelioma of tongue and mouth. Excised.
	19.	Deflected nasal septum and turbinal hypertrophy.

CASES UNDER MR. LANE.

LAZARUS	2.	Sebaceous cyst. Excised.
	2.	Varicose veins. Excised.
PATIENCE	1.	Varicose veins and ulceration.
Stretcher.		Œdema and ulceration of feet and ankles. ? Cause.

CASES UNDER MR. DUNN.

CHARITY	19.	Tuberculous submental glands. Excised.
	21.	Recurrent melanotic sarcoma of neck. Eroded.
LUKE	4.	? Vesicular calculus. Hæmaturia.
SAMARITAN	11.	Gangrene of feet. Frost bite.

CASES UNDER MR. FRIPP.

DORCAS	Cot D.	Hare-lip.
SAMARITAN	8.	Necrosis of jaw.

The Alley.

There is a street in the House of Guy,
Or rather alley, I should say,
For alley's the name that suits it best;
And 'tis the place where the night nurses rest.
The alley is narrow, the roof is low,
And through the casement the wind doth blow.
The rain pours down, and the rain pours in,
The alley seems damp and the blankets seem thin.
The pipes that should heat it are mostly quite cold;
If you go for a bath there's no water, you're told.
If you want to sit still in the alley so bleak,
Put all your warm things on, a fur round your neck;
To your feet a hot bottle, to your head a thick rug,
And inwardly take some hot milk in a mug.
Or else, and now listen and take my advice,
You'll be frozen as solid as strawberry ice;
And last, but not least, every night at old Guy's
There's a horrible bell for the weary to rise.
But never you mind if the alley be narrow
So long as you have no heart-rending sorrow;
And never you mind if the rain pours in,
And the alley seems cold and the blankets seem thin,
For you've plenty of work, what can you want more?
And pork pie and red sausage, I'm sure you've galore.
And capes you have with black and white lining.
And lemonade drinks when e'er you are dining;
And mutton and capers and pickles and rice,
At nine in the morning, now isn't that nice?
You can wear all your worldy clothes when you go out,
So really there's nothing to grumble about.

. . . . . .

But then, it is only human nature's way
To have something to grumble at every day.

Hospital for Consumption and Diseases of the Chest, Brompton.

WINTER SESSION, 1901.

LECTURES AND DEMONSTRATIONS.

WEDNESDAYS, AT 4 P.M.

February 20th.—Dr. Fowler, "The Treatment of Cardiac Failure in Aortic Regurgitation." (This lecture will be delivered at 3 p.m.)

February 27th.—Dr. Kidd, "Laryngeal Tuberculosis."

March 6th.—Dr. Latham, "The Stages of Pulmonary Tuberculosis."

March 13th.—Mr. Stanley Boyd, "Surgical Cases in the Wards."

March 20th.—Dr. Hector Mackenzie, "Asthma."

March 27th.—Dr. Acland, "Bronchiectasis."

April 3rd.—Dr. Habershon, "Cases of Mitral Stenosis."

The Lectures are free to all qualified Medical Practitioners, and to Students attending the practice of the Hospital.

Passim.

The publishers of "Wilks' Pathological Anatomy" have recently come across some spare unbound sheets, which will make up about one hundred copies. Sir Samuel Wilks has most generously given them over to us, with the proposition that they shall be bound and sold at a low fee to Guy's men, any profit resulting from the sale to be devoted to the hospital. We are, therefore, prepared to offer these copies, bound in cloth, at the absurdly low figure of 2s. 6d. each. We have no doubt that the opportunity of acquiring such a standard work at such a low price will be eagerly seized on by many more than the available number of copies will satisfy. We have, therefore, arranged that they will be given to the first one hundred subscribers who send their names in to the Editor or to the Librarian.

A new society has sprung into existence, to be henceforth known as the "Guy's Hospital Physiological Society." We understand that Dr. Pembrey has been the prime mover, his object being to encourage students to take a more personal and lively interest in the subject, by discussing it amongst themselves. The meetings are quite informal and are held every Thursday afternoon at 4 p.m. in Dr. Pembrey's private research room. At every meeting a paper is to be read by one of the members, followed by a discussion. It is not expected that the paper be original, but is merely supposed to give a resumé of the latest work and literature on the subject. A further object of the society is to accustom men to address their fellows and express their ideas.

The first meeting was held last week on Thursday, February 7th, when Mr. Bolus read a very able account of the past history of physiology, which we hope to report in our next issue. There was a large attendance, and the enthusiasm with which the project has been taken up augurs well for its future success. Although primarily intended for junior students, those in the wards might find attendance at these meetings very beneficial, by enabling them to refresh their minds with the subject, and such is the progress of the science that they would probably pick up many new facts from their more junior fellow students. The annual subscription is 2s. 6d. and should be paid to Mr. H. F. B. Walker, Hon. Sec. Dr. Pembrey is president with Drs. Beddard and Spriggs as vice-presidents.

Anyone who saw the procession of men trouping down towards the physiological theatre last Wednesday afternoon might well ask himself what special function was about to take place. But it was only a clinical lecture after all! No one who was present in the theatre will be surprised to hear there was a record attendance, as far as the memory of the present janitor carries him. Altogether 220! It must afford considerable gratification to a lecturer to know that the thoughtful work and study which he devotes to a lecture are thoroughly appreciated, and while we would in no way minimise the fact that men know when they are going to hear "something to their advantage," and go for it, yet we cannot help feeling that the record attendance of last Wednesday was in some measure a demonstration of gratitude for the great devotion shown by the Lecturer to the students in his infinite pains to assist them in their studies. We hope to report the lecture in our next issue.

We publish elsewhere a first subscription list for the Antarctic Fund, and also a letter from Dr. Koettlitz, in which he makes an eloquent appeal for a more hearty response to the call for donations. Dr. Koettlitz is a thorough enthusiast, and is bent on making his part of the expedition a success. He is devoting all his time and energies to this object, and he is thoroughly efficient to accomplish the task he has undertaken. Surely Guy's men will not allow this unique opportunity of adding entirely new facts to our present storehouse of scientific knowledge to pass by for the want of the necessary L.S.D., which they can easily supply at small sacrifice to themselves by a generous movement of the hand to the pocket! "Many a mickel makes a muckel," as the old saying is. If only everyone will subscribe their mite, the necessary sum will soon be reached.

ON the date of issue of this GAZETTE the Debating Society will hold their fourth meeting of the session. Dr. Fawcett will take the chair, and Mr. Wylie will dilate on the evils resulting from the meddling interference of British pioneers among the Chinese. Mr. Watson will endeavour to convince the House that Mr. Wylie is all wrong. Several notable orators are expected to speak on both sides. It is hoped that there will be a good attendance of junior men. Members of the new Physiological Society should turn up to acquire a facility of speech for their own more learned discussions.

MUCH to the chagrin of all concerned, the clerk of the weather has again played false, and once more the first Rugby Cup Tie match has had to be postponed on account of the frost. We hope men are not permitting the grass to grow under their feet, in other words, allowing their muscles to get slack. They should, on the contrary, turn the present misfortune to good purpose, and prepare themselves more efficiently than ever for the contest.

THE Hon. Secretary of the Cricket Club has asked us to announce that some Cricket Cups have been unearthed in the Gymnasium, belonging to Members of the 1891 team, which won the Inter-Hospital Cup. They are inscribed with the following names—C. R. Lucas, C. J. Francis, E. S. Tuck (2), S. G. Layman, H. H. Hewetson, H. D. Joyce, R. B. Stamford, J. H. Bettington and C. Reid. They may be had by application at the Smoking Room Bar, or by communication with the Cricket Secretary.

THE Nurses' Choral Society and Students' Glee Club have been very active of late, and many a time and oft have the strains of sweet voices wafted across the quadrangle during the past two weeks. Their efforts are not this year to be crowned with the glory of a public concert. Those, however, who have been favoured with an invitation will have the pleasure of hearing their combined voices at an "At Home" to be given by the Council of the Guy's Hospital Nurses' Recreation Society, next Saturday evening, at which Mrs. Cosmo Bonsor has kindly consented to preside as hostess.

LITTLE does one realise in first undertaking the task of editorship the dangers to which one may be exposed, should one by misfortune allow a misstatement to appear in glaring black and white. A crooked glance of the eye from one side of the page to the other may be the cause of much woe. Thus it was that on glancing at a list handed to us of donations received in the various boxes of the hospital our erring eye made £137 18s. 8d. appear opposite "Bright," but had we read aright, we should have coupled it with "Out-patients." To put it mildly, Out-patients became for several days uncomfortable quarters, and as we are compelled to pass many an hour down there, we hasten to make due apologies.

WE regret to announce the death of Dr. Arthur Henry Jones, late physician to the General Infirmary, Northampton. He was a nephew of the late Dr. Habershon, Consulting Physician to Guy's Hospital. He was a prominent member of the Christian Union during his time at Guy's, and won the esteem and affection of all his colleagues.

WE are asked to announce that owing to the death of Her Majesty, the late Queen, the Dental dinner, which should have taken place on February 9th, has been postponed to March 23rd. Any tickets obtained for the previous date will, of course, be available for the forthcoming dinner.

South African Memorial Fund.

(This Fund has for its object the erection of some permanent Memorial in the Hospital to those Guy's men who have fallen in South Africa.)

FIFTH LIST OF SUBSCRIBERS.

	£	s.	d.
Amount already acknowledged	115	11	6
Capt. H. Hewetson, R.A.M.C.	2	2	0
C. R. Hodgson, M.D.	1	1	0
H. J. Starling, M.D.	1	1	0
J. Tanner, M.D.	1	1	0
Surg. H. E. C. Fox, M.B., R.N.	1	0	0
Mr. Fripp's Firm...	1	0	0
G. T. S. Sichel, F.R.C.S.	1	0	0
Stephen Floyd, M.D.	0	10	6
Stephen Keele	0	10	6
W. C. P. Winter	0	10	6
F. Wyatt-Smith	0	10	6
	£125	18	6

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

Delirium Tremens.

SIR,—In response to your observations concerning the case of Delirium Tremens, etc., in your last edition of the GAZETTE, allow me to make a few practical remarks. Now, in cases of delirium tremens, we may say there are three essentials, namely, rest in bed, the administration of food, and the procuring of sleep—the latter your correspondent, "H. C.," found so difficult to obtain. I have had a considerable experience in cases of delirium tremens, and always endeavour to produce sleep at all hazards. Chloral is a drug not free from danger where there is a weakened heart, but I almost always give it with bromide and with morphia, but invariably with digitalis, and have never had any ill effects—quite the contrary. Some time since I saw a man who, I was told, had not slept for a week, he certainly was in a very bad state, and I thought would not recover; but two or three doses gave him five hours sleep, and he got well. Then, with regard to alcohol; I think slight cases are better without it, and with rest and food soon recover; but in severe cases like the one just mentioned I always resort to it, in the form of brandy with egg and milk, and with a weak heart it becomes essential.

D. O. FOUNTAINE.

225, Camden Road, N.W.

DEAR SIR,—Apropos of the interesting case of Delirium Tremens reported in the last GAZETTE, it may be asked, What is the evidence, pathological and clinical, that primary cardiac failure was the fundamental consideration? On the answer must depend the main line of treatment. A regular pulse of 80, and of good character, late in the attack, points rather in the opposite direction. Definite heart changes due to alcoholism, seem, according to authorities, to be fairly late in appearing, and comparable to the cardiac changes accompanying nephritis. On the other hand, there is ample evidence of what a former teacher at Guy's would perhaps call "a neuritic condition of things." There are, practically, no antics the heart will not play under the influence of faulty innervation.

The present case reminds me strongly of one I reported a few years ago in the *British Medical Journal*. In that instance the child was in a condition very similar to the one described by A. C., and apparently, one might say evidently, moribund. The convulsive state had continued without intermission for two and a half hours, both pulse and respiration threatened to cease. In about a minute and a half, when the child came under the influence of chloroform, coma was suddenly changed into sleep, the eyelids dropped over the staring insensitive eyes, a sudden flush extended over face and body, pulse and respiration resumed their normal rhythm, the whole change occupying only a second or two.

The cause of convulsions in this case was influenza, perhaps a combination of pyrexia and toxæmia; but the practical point is that the throwing out of action of the regulating nerve centres (whatever they are) became the question of vital importance, and that probably nothing but chloroform (whatever its action may have been) would have enabled them to regain control of the vital functions. Is it not possible that cardiac failure in the GAZETTE case was similarly due to faulty innervation secondary, in fact, to the convulsive state? M.

Antarctic Expedition.

DEAR SIR,—I had hoped that Mr. Pakes' letter which appeared in the last number of GUY'S GAZETTE, as well as your editorial, would have caused a somewhat more marked and substantial show of interest from Guy's men, and everyone interested in Guy's, upon the subject of Antarctic Exploration than it has done. I had hoped it especially, because bacteriology is so intimately associated with the progress made of late years in medical science, also again because this will be an entirely new field for bacteriological investigation, none having ever yet been made there; it may therefore prove of unique interest, and should on that account appeal directly to Guy's men. It may be that Guy's men have their minds always so exceptionally absorbed in the medical and surgical work proper in which they are engaged, that they cannot find the time or opportunity for making themselves conversant with work, similar to some of theirs, but followed out in other and perhaps wider fields! It may, therefore, prove of some interest to them for me to briefly give some account of the bacteriological work which has been done in the opposite part of the world to that of my present selection, *i.e.*, in the Arctic.

Foreigners are the only people who have done anything there, especially the Swedes, when under Professor A. G. Nathorst, in 1898.

Dr. Levin, of his expedition to Wiche Land, examined the air, the water (marine, at all depths), and fresh snow and ice (on land and sea), and the intestines, &c., of all animals obtained. He gives his results in some detail in the Annales de l'Institut Pasteur. I will summarise them as follows:—

He filtered a total quantity of 21,600 litres of air, and found that, like the air of high mountain summits, it was practically bacteria free.

In sea water (Arctic) he found many bacteria, the number, however, unlike what might have been expected, increased the greater the depth at which the water was obtained, and that, without regard to temperature, for at a depth of 1,476 fathoms (a fathom is six feet) and at a temperature of 29° Fahrenheit (−1·5° centigrade) the number of colonies which grew upon a jelatine plate were 39; whereas he obtained less than half that

number in samples he took from only 12 fathoms, with the water at the temperature of 37° Fahrenheit, thus showing that bacteria can grow under conditions profoundly different to that under which any other members of the vegetable kingdom can do so.

He found bacteria in all fresh water upon land, upon ice (land or marine).

The intestines of all Arctic animals, vertebrate and invertebrate, sea or land, that he obtained, he found to be absolutely sterile, with the exception of four animals, of the Polar bear, of two seals, and of the Burgomaster gull (*Larus glaucus*).

Here, again, how different to what was expected! It disproves absolutely what at one time was thought a necessity, that it is of advantage to, or necessary for, an animal to have bacteria in its intestines.

Inasmuch as these few investigations have proved of so much interest, and of so unexpected a nature, how much of interest may not be obtained by careful investigation at the opposite Polar area, *e.g.*, the South Polar regions. That septic and other morbid conditions do occur in Polar animals I know from my personal experience in the high north when with the Jackson-Harmsworth Polar Expedition; but not having then had the means for bacteriological work there, I was unable to determine the nature of these.

That much more might be done than seems possible at first sight, I am sure is the case with a properly-equipped laboratory, in the more inaccessible and desolate south, much more than has ever been done thus far in the north.

Would it not, therefore, be a nice thing, and would it not redound to the honour of Guy's, for our alma mater to come forward nobly and show its interest in things scientific by giving the equipment of that department of science to the National Antarctic Expedition, which, by-the-bye, is none too well off for funds?

That I should like it personally needs no saying, and that Guy's should identify itself with a good, National, and patriotic work would be an intense pleasure and pride to me, as well as, I should think, to all Guy's men.

—Yours very truly, REGINALD KŒTTLITZ.

13th February, 1901.

Nursing News.

MATRON'S OFFICE.

We regret to announce that Nurse Edith Wooll, of the Guy's Trained Nurses' Institution, died on Tuesday, February 5th, after a week's illness, of acute pneumonia.

On February 4th, Probationer S. A. Hayward was appointed Head Nurse in Cornelius ward, Nurse Lewis having been transferred to Job ward, and Nurse Garnet to Miriam.

On January 29th, Probationer Blayney was appointed Head Nurse in the Eye wards.

On Monday, February 4th, Miss Amiè Davidson (who has just returned from South Africa) took up her duties as Sister of Cornelius ward.

On February 5th, Nurse Pearce left the Hospital to take up work at the Guy's Trained Nurses' Institution, and Probationer Pitman was appointed to succeed her as Head Nurse in the Surgery.

In Lighter Vein.

A Farcical Comedy embodying the elements of a Terrible Tragedy, entitled—

"FEES":

Or, "WHERE DO I COME IN?"

TIME—*In Perpetuity* (so the "Green Book" says)

PLACE—*Papa's Bank* (mostly).

DRAMATIS PERSONÆ—*The more the merrier.*

SCENE I.

[*An Interior. On the left, up stage, is a table and a man with a list of attendances, whose favourite pastime is playing "I spy you" at lectures. On the right is a table with a slot in it (probably for bank notes), a desk, and behind that Crouche(r)s a genial smile wearing a man. Enter a* YOUTH.]

YOUTH: Please I want to be a doctor.

[*The smile on the* CROUCHER *broadens.*]

The CROUCHER: One hundred and fifty guineas, please.

YOUTH (*taking the money from his sovereign purse*): Here you are. Now what do I do?

The C. (*in ecstacy of mirth*): Do nothing! *You're done.*

[YOUTH *exits wondering.*]

The C. (*to man at left hand table*): Hooray, we can begin to build *another* nurses' home in the park now.

[*Executes sword dance on two crossed application forms as curtain slowly falls.*]

SCENE II.

[*Same place, same people. A month has passed. Enter* YOUTH.]

YOUTH: What's this about two guineas for a class?

The CROUCHER (*beaming*): Yes; that's all right.

YOUTH: But I thought I'd paid for everything when I joined.

The C.: Ha! ha! That's good. He! he! he! Paid for everything! Ho! ho! Why, you haven't paid for anything yet.

Youth (*in alarm*): But—but, that hundred and fifty guineas! What was that for?

The C. (*becoming suddenly grave and fixing* Youth *with his eye*): What for? Why, so that you might have your letters addressed to the hospital, of course.

Youth (*collapsing*): Then how much do you think it will cost me altogether?

The C. (*coming close and hissing through his teeth*): How much have you got?

Youth (*sinking on his knees*): Please—I—I don't know.

The C. (*in an awful voice*): Well that's what it will cost you!

[Youth *gives a shriek of despair and falls fainting on the floor.* The C. *puts one foot on his neck, folds his arms, and tableau. Curtain falls to unseen subdued chorus singing "We've all had some."*]

J. U. G.

Guy's Hospital Debating Society.

On Saturday, January 19th, a meeting of the above Society took place. Dr. Spriggs took the chair at 8 p.m., and after the minutes of the last meeting had been read by the Secretary, Mr. Thompson occupied the time for private business by his customary attack upon the Honorary Secretary for the way in which previous meetings had been reported in the Gazette, he maintaining that the accounts were inaccurate and critically false. The House, however, thought differently, and the motion before the House was therefore proceeded with without further delay.

Mr. Griffin, with a speech full of bitter reproaches and sweeping anathemas to the "Nobility, clergy and gentry of the land," proposed and maintained "That the House of Lords ought to be abolished." He commenced by saying that he feared his subject would give offence to many of the staunch Conservatives in the House, but he would endeavour to introduce the motion as carefully as possible. He then proceeded to show how and when the Upper House was founded, and traced its passage through the pages of history up to the present time, when the hon. member considered it was out of spirit with the democratic feeling of the age. He deplored the presence in the House of bishops, who, by appealing to past records of the Chamber, he showed had opposed tooth and nail many urgent reforms. The opener then referred to the fact that the majority of members of the gilded chamber were large landowners and were only to be expected to legislate in their own interests. In conclusion, he called upon the House to vindicate their love of progress and reform by voting for the motion.

Mr. A. E. Pakes then opposed the motion with a goodly show of historical facts. He said that he wished to treat the subject from a much wider point of view than that taken by the honourable proposer. He would but consider this "deplorable" heredity as a factor in the process of evolution through which the British Constitution had passed from the earliest times. He insisted on the importance and necessity of the Dicameral system, and quoted numerous instances in which any but the Dicameral system had utterly failed. He argued that the Upper House must be a stable one, not subject to the oscillations of adverse elections, and this was so since the Lords were formerly the most powerful landowners, their sons inheriting their power and naturally taking their seats in the council. The Upper House, too, as part of a great whole, was constantly developing, for peerages were now made from the bravest, the most powerful, and the most intellectual men of the day. Flatly denying Mr. Griffin's bald accusations against those whose right it was to sit in the House of Peers, except in a few cases, he urged that heredity was rather a beneficial factor than otherwise, and maintained that the House of Lords was one of the institutions of our country of which the nation had every reason to be most proud.

The debate then became general and centred itself chiefly around the question of heredity. On the one side it was maintained that by the theory of evolution the clever intellectual father should beget a son of similar capacity, whereas, on the other hand, it was pointed out that experience rather tended to refute that principle. It was almost universally agreed by the House that the Constitution required a second chamber, but it was urged that the right of membership by heredity should be substituted by some principle of life membership by election.

The debate was wound up by a reply from Mr. Griffin, in which he said that he regretted that the honorable opposer should have wasted the time of the House by giving Mr. Thompson spelling lessons. He complimented Mr. Rowlands on his knowledge of horse-racing and in reply to those who had compared the House of Lords to a "drag-chain" upon the Commons, he said a chain was as strong as its weakest link and by showing the House the vicious and immoral characters of some of the Lords, he thought he had demonstrated that the weaker links of the chain were very feeble indeed.

The following gentlemen took part in the debate:—Messrs. Black, Gibson, Thompson, Tuohy, Spriggs (jun.), Stamm, Palmer, Hicks, R. P. Rowlands, Pinching, Walker and Coplands. Altogether nine maiden speeches were made during the evening.

The Motion was eventually lost by 3 votes.

For the motion	13
Against	16
Majority ...	3

The Meeting terminated with a vote of thanks to the Chairman.

Novelties.

A MODIFIED CELLULOID A.C.E. INHALER.

Dr. Silk's pattern of celluloid inhaler for administration of the A.C.E. mixture is the one in general use at Guy's, and it has many advantages. But it has certain disadvantages.

One of these is that in many cases, especially with edentulous patients, the inhaler does not fit the face satisfactorily, and the anæsthetist is forced to resort to some clumsy and uncomfortable contrivance, such as holding a towel wound close to the patient's face, and thus hindering the too free access of air.

Another difficulty the anæsthetist has to contend with is the liability of the patient to "anæsthetic burns," and in a prolonged anæsthetic it is a difficult matter to make sure that no anæsthetic runs down the flannel bag and reaches the patient's face.

This again is usually obviated as far as possible by the use of a towel.

With a struggling patient an annoying and not unfrequent occurrence is for the elastic holding the flannel bag in position to slip from the margin of the inhaler, necessitating a pause in the administration while it is replaced.

Some time ago I made an attempt to lessen these disadvantages by using a rubber face-piece over the flannel. This was not altogether satisfactory as there is nothing to hold the face-piece in position, and hence a liability for both face-piece and flannel bag to slip.

Lately, however, Messrs. Down Bros. have made a celluloid inhaler which reduces these disadvantages to a minimum. The chief difference is that the margin of the inhaler is everted, forming a complete rim about a quarter of an inch wide. The notch for the nose, too, is very considerably diminished, as it was at this point that the slipping of face-piece and flannel bag usually commenced.

The elastic of the bag grips this rim, and thus there is very little likelihood of it slipping off. The rim also allows a rubber face-piece to fit firmly and securely over the flannel. When any of the anæsthetic runs down the flannel it does not reach the patient's face, but tends to collect in the groove formed by the face-piece and lower end of the inhaler. Even in prolonged anæsthetics if this groove be wiped out occasionally anæsthetic burns are easily avoided.

The importance of strict cleanliness in the administration of anæsthetics is now fully recognised. If a celluloid inhaler and the sponge be well washed in tepid water after use, and then left in formalin 1 in 250 for half an hour, and then again washed in clean water to get rid of the formalin, and a clean flannel bag be used for each administration, then sepsis or dirtiness cannot be brought forward as one of the disadvantages of a celluloid inhaler.

P. TURNER.

From the Gazette's Special Pathologist.

NOTICES.

H. L., MANCHESTER.—This growth is a soft spindle-celled sarcoma, traversed by many vessels, and with large effusions of blood into it. The growth has destroyed the entire thickness of the radius at one spot, and invaded the deep layer of muscles in the forearm. In this way the surface of the ulna has become superficially eroded, but there is no fracture of the bone. Ulna will be sent on as soon as macerated.

G. E. H., RAMSGATE.—No tubercle bacilli were found in the sputum.

L., WOOLWICH.—*Microscopical examination.* The centrifuge separates a fair quantity of deposit, which is very largely composed of red blood discs. There is also a fair number of casts, the majority of which are hyaline or finely granular, but a few are blood casts. A few tubal cells are free in the deposit. There is practically nothing else.

X. Y. Z., HASTINGS.—No tubercle bacilli were found in the specimen.

H. G. A., NOTTINGHAM.—These hairs are infected with the Tinea Tonsurans var :—microsporon audouini.

PATHOLOGIST.

Pass List.

Final Conjoint Examination, January, 1901.

MEDICINE AND SURGERY.—*R. D. Attwood.

MEDICINE AND MIDWIFERY.—*F. Curtis, P. S. Mandy, S. J. Ormond, *L. Pern.

SURGERY AND MIDWIFERY.—H. S. A. Alder, G. G. Davidson, E. F. G. T. Heap, D. L. Morgan, E. G. Wales.

MEDICINE ONLY.—E. G. Andrews, *T. R. Beale-Browne, A. E. Cawston, *F. G. Cross, G. S. Graham-Smith, *E. A. Longhurst, *J. F. Robinson, E. Shelton-Jones, *E. W. H. Shenton, *A. Ayre Smith, *D. W. Smith, *A. W. Talbot, *R. Tilbury, K. V. Trubshaw, P. H. Ward.

SURGERY ONLY.—H. A. Ehrlich, *J. A. B. Hammond, H. A. Higgens, P. D. Hunter, A. C. Lewis, *G. Shorland, H. Wacher, A. Wylie.

MIDWIFERY ONLY.—H. V. Bagshawe, S. C. H. Bent, E. C. Bevers, E. J. F. Hardenberg, R. Jimenez, E. H. Kitchin, F. B. Manser, R. P. Marshall, T. A. Matthews, F. D. Welch, J. L. Whatley.

* Denotes completion of Examination.

University of London, January, 1901.

INTERMEDIATE (M.B.) EXAMINATION.

ENTIRE EXAMINATION.—SECOND DIVISION.—P. A. Peall, H. D. Smart, Hugh Watts.

EXCLUDING PHYSIOLOGY.—SECOND DIVISION.—W. H. Cole, C. H. Dawe.

PHYSIOLOGY ONLY.—SECOND DIVISION.—H. M. Goldstein, H. S. Jones, C. D. Pye-Smith, E. W. Strange.

PRELIMINARY SCIENTIFIC EXAMINATION.

ENTIRE EXAMINATION.—FIRST DIVISION.—C. C. A. De Villiers, W. H. Miller, F. T. H. Wood.

SECOND DIVISION.—T. C. Pocock.

CHEMISTRY AND EXPERIMENTAL PHYSICS.—T. H. Barton, E. M. Harrison, P. D. F. Magowan, E. L. R. Norton.

BIOLOGY.—H. S. Knight, E. F. Milton, F. A. Sharpe, J. T. Smalley.

Reviews.

The price of books submitted for review should in every case be stated.

A Manual of Medicine. Edited by W. H. Allchin, M.D., F.R.C.P., F.R.S. Edin. Volume II. (MacMillan and Co., Ltd.)

In criticising this book, or strictly speaking, part of a book, it is difficult to know from what standpoint it should be viewed.

There are many arguments for and against the publication of these composite works, most of them too well known to require repetition, but in the instance before us we are rather doubtful whether this book should be placed in the category of "advanced series," and so be looked on as a work mostly for reference, or for the use of the student who has already mastered the rudiments of medicine, or whether it should be placed in a more elementary class, and be dedicated to him who is on the threshold of his work and has all to learn.

We cannot help thinking it is meant to hit the happy mean, and has consequently failed to accomplish either end. It is too advanced to meet the wants which are at present satisfied by Dr. Taylor's and Professor Osler's work, and it is not advanced enough to fill the place at present occupied by Professor Clifford Allbutt's System of Medicine.

In the volume under discussion, however, most of the articles are clear and concise, and very readable; in some, indeed, the literary "style" is much above that of most medical works.

The articles on Parasites, Diseases of the Blood and Malignant Disease, strike us as being the best.

We should like to congratulate Dr. Allchin on the illustrations. They are diagramatic, and consequently clear and instructive, and we are glad to find he has not perpetuated any more micro-photographs, which, as one of our physicians says, all look like sections of plum-pudding.

The Essentials of Practical Bacteriology. By H. J. Curtis, B.S., M.D. (London: Longmans, Green & Co. 1900.) 290 pages.

It is much easier to criticise a book than to write one, and we have very little doubt that the author of this book could easily write a better book upon the subject if he were to start afresh after his experience with this one.

Within recent years it has been seen that a great amount of confusion has arisen because so many of the bacteria, which have been discovered by the older workers, are so inadequately described that it is certain that many have been described under different names which are really the same. In order to avoid further confusion, it has become imperative to describe the greatest possible number of reactions given by every micro-organism. This is especially important when we are dealing with the non-pathogenic bacteria, and with those of the pathogenic bacteria which have no single reaction which is characteristic. For the clinical bacteriologist, who is often expected to isolate and identify half a dozen bacteria isolated from the peritoneal cavity within a week, it is absolutely essential that he shall have a very full description of the various bacteria which he is likely to come across in the course of his investigations.

A practical work upon bacteriology, one in which "attention has been paid to the special needs of clinical bacteriologists," and one which gives "detail in dealing with certain subjects—for advanced students—to provide a starting-point for research," should therefore contain at least indications of most of the reactions used by modern bacteriologists. A careful search has, however, failed to discover such reactions as the fermentation of lactose, sucrose, or glycerin, the reduction of nitrates to nitrites, the production of sulphuretted hydrogen, or the reaction of milk after the growth of bacteria.

There are many errors and strange omissions. For instance, on page 58 we find the following:—"Ammoniacal decomposition of urine is also due to fermentation, in which, by means of the *ferment known as the micrococcus ureæ*, there is a conversion of the urea into ammonium carbonate" (our italics). On page 65, it is stated that the proteus vulgaris has been found in urine in cases of cystitis. It is well known that in the cases of cystitis produced by the proteus vulgaris there is a very considerable conversion of the urea into ammonium carbonate whilst still in the bladder. Are we to conclude that the ammoniacal decomposition is caused by the ferment known as the micrococcus ureæ, which ferment is produced by the proteus vulgaris? As a matter of fact, of course, the proteus vulgaris converts urea into ammonium carbonate in vitro.

The fact that the book is one of the "Essentials" series is sufficient evidence of its being well printed, and the illustrations are for the most part excellent. We hope that we shall not offend the author when we say that if he were to bring it up to date, it would make a very useful addition to the works upon the subject.

Outlines for Dissectors. By F. G. Parsons, F.R.C.S. (Bale, Sons & Danielsson, Limited). Price 1s. 6d.

Though fully agreeing with the author's prefacial remark that the great aim of demonstrators of anatomy

is to train their students' powers of accurate observation, we fail to see how the production of this book meets that end.

Each volume contains a number of outlined sketches of anatomical regions, presented to the dissector, so that he may fill in the various structures met with in his "part," and thus possess a record of his work. This plan has been tried in our own dissecting-room, and we find that the region has perforce to undergo a good deal of arrangement in order to fit in with the author's diagrams, and further, when all is complete the picture results almost in one invariably found in an ordinary text-book in anatomy. Few students can now enter their medical career without some idea of putting a pencil to paper, outlining his sketches for himself, and we maintain that a diagram made from the first, however rough, is infinitely preferable to one superimposed on a stereotyped form. By all means let every dissector make sketches of his part, but rather let him portray those of dissections not shown him in his books, and thus further train his powers of observation.

We cannot conceive the publication being of much value to those who *will* not draw, nor do we think it will be of much help to those who do.

A Handbook of Sanitary Law, for the use of Candidates for Public Health qualification. By B. Burnett Ham, D.P.H. (Camb.), M.D., M.R.C.S., L.R.C.P. (Ash & Co., Ltd., London. Price 2s. 6d. net.)

A second edition of this very useful little handbook has now been published, in order that it may be thoroughly abreast of the many legislative changes that have taken place during the last two years in Sanitation. It deals with the subject clearly and concisely and gives a bird's eye view of the present condition of legislation for the various branches of the subject, indicating the respective sanitary authority for each, and the provisions of the various Acts relative thereto. It should prove of considerable value to the student as a synopsis for examination purposes.

On the use of Massage and early passive movements in recent Fractures, and other common surgical injuries and the Treatment of Internal Derangements of the Knee-joint. Three clinical lectures delivered at St. Thomas's Hospital. By William H. Bennett, F.R.C.S. (Longman, Green & Co.) 4s. 6d.

In these three lectures Mr. Bennett claims much for the treatment by massage of fractures, dislocations, sprains, and derangements of the knee-joint ("slipped cartilage" conditions), and he supports his claim by considerable personal experience. Many practical and valuable hints are given as to the method of massage to be adopted in the various conditions considered. The chief difficulty to a more general adoption of massage treatment for fractures, etc., in private practice, is, as he himself admits, the necessary devotion of a considerable amount of time to each case by a competent individual.

Sport.

Rugby Football.

GUY'S v. KENSINGTON.

(GUY'S, 13 POINTS; KENSINGTON, 6 POINTS).

Played at Wood Lane on Saturday, February 9th, before a small but select crowd. Guy's won the toss and Thomas kicked-off. The ball was quickly worked into the Kensington twenty-five by the forwards, who started the game with plenty of dash, securing the ball in almost every scrum, and heeling out smartly to the halves, who made good openings for the three-quarters, who were within an ace of scoring on several occasions during the first twenty minutes, but were always kept out by the Kensington backs, who were tackling well. Play continued in our opponents' lines for practically the whole of the first twenty minutes, at the end of which time, as the result of some good passing among the backs, Morgan got in for us between the posts, and himself converted the try. After this, the play on our part was hardly of such a high order as previously, and the ball was kept in mid-field until McEvedy, taking a difficult pass very neatly, made a splendid run up the right wing, dodged the full-back, and scored almost between the posts, the major point being registered. After the kick-off the aspect of the game completely changed, the forwards who had up till now played a strong vigorous game, seeming to fall to pieces, securing the ball from the scrum on very few occasions, heeling badly, and breaking away and following up with no energy, the rest of the first half being of a very scrambling nature. Kensington's left-wing three-quarter, Blackstone, putting in a lot of good work, and their forwards having worked the ball into our twenty-five, the three-quarters got on the move, and owing to defective tackling on our part, they got in at the right hand corner; the try, however, not being converted. Half-time was then called, the score standing:—Guy's, 10 points; Kensington, 3 points.

On restarting, Kensington had the better of the game, the same lack of vigour among our men being very noticeable, especially among the forwards, and play was principally confined to our part of the field—Blackstone being very prominent amongst their three-quarters. At this time we lost the services of French, who had to be carried off the field with an injured knee, but to everyone's relief he was able to resume play after about ten minutes' absence. About half way through the second half, some faulty fielding and bad tackling among our backs enabled Kensington to score again, this time between the posts, the try, however, was not improved upon, the ball striking one of the uprights. Play continued at our end of the field, and one of their men only just missed dropping a goal. Towards the end our men pulled themselves together, and Wadson, taking a difficult pass, made a dodgy run and scored wide out; Morgan

making a good attempt at goal from a difficult angle. Time was called immediately after, leaving Guy's the winners, after a disappointing game, by 2 placed goals and 1 try, to 2 tries. Team:—

GUY'S.—E. M. Harrison (back); S. P. Wadson, E. Morgan, L. J. J. Orpen, P. F. McEvedy (three-quarter backs); M. G. Louisson, A. O'Brien (half-backs); H. A. Cutler, T. P. Thomas, R. C. Lawry, A. H. E. Wall, H. S. French, B. Glendinning, E. H. B. Milsom and A. R. Thompson (forwards).

REMARKS.—Considering that our men were supposed to be in cup-tie form, the display was anything but encouraging, and if we would regain the Cup, the standard of play must be of a very much higher order. The forwards completely went to pieces after the first twenty minutes, and at the risk of making ourselves objectionable, we would express the opinion that they seemed sadly out of training, or shall we say it was lack of keenness—surely a state of affairs which should not exist at this time of the season, with a strong team to meet in the first round of the Cup-ties in a day or so, but doubtless they will prove us wrong on the momentous occasion. We would recommend smarter heeling, and quicker breaking up the scrum and following up, and perhaps the marked falling off in the second half was due to the fact that three of our forwards were repeatedly winging, and both amongst the forwards and backs that keen tackling and prompt following up which are so essential to cup-ties, seemed entirely absent; on this account ground was repeatedly lost by the high kicking of the backs into midfield (the means of gaining ground by finding touch being seldom utilised); the Kensington backs invariably finding touch considerably to their own advantage.

GUY'S 2ND XV. v. SUTTON.—SURREY SENIOR CUP.

(SUTTON, 3 POINTS; GUY'S, NIL).

Played at Sutton on Saturday, January 19th. The muddy condition of the ground, together with constant rain and high wind, rendered combined play out of the question. The game resolved itself mainly into a contest between the forwards on either side. Guy's were unfortunately one man short, and throughout the game had only seven men in the pack.

Sutton, winning the toss, played with the wind in their favour during the first half of the game. The defence on both sides was very keen, and at half-time nothing had been scored. During the greater part of the second half Guy's were in their opponents' territory, a result due chiefly to Pye-Smith's well-judged kicks. On several occasions a score seemed imminent, but the Sutton defence was always equal to the occasion, and when time was called, neither side had scored.

It was then decided to play extra time, and in the last five minutes Sutton scored a good try wide on the left; the attempt at goal was unsuccessful. Immediately afterwards, Wadson got over twice for Guy's, on both occasions, however, the referee ruled the pass forward. Sutton were therefore returned winners by one try to nil.

REMARKS.—The whole team worked hard; especial praise is due to the seven forwards. Pye-Smith at full-back had little tackling to do, his kicking was exceptionally good. Kynaston was good behind the scrum and got the ball away well. Team:—

GUY'S.—C. D. Pye-Smith (back); S. P. Wadson, S. L. Pallant, W. H. Burney, H. S. Brown (three-quarter backs); A. E Kynaston, J. T. Hicks (half-backs); A. H. E. Wall, R. G. Anderson, H. Watts, G. T. Collins, R. M. Rendall, W. W. C. Jones, W. Vaughan (forwards).

Association Football.

SURREY SENIOR CUP.—THIRD ROUND.

GUY'S 1ST. v. EAST SHEEN.

(EAST SHEEN, 3 GOALS; GUY'S, 2 GOALS).

This match was played on Saturday, January 19th, on the St. Margaret's Ground, near Richmond, and after a close and most exciting game ended in favour of East Sheen by the narrow margin of 1 goal.

The weather was most unpropitious, a stiff breeze blowing over the ground and rain falling intermittently. East Sheen kicked off, and our forwards at once got possession of the ball and ran it down towards our opponents' goal. A corner was conceded us, but nothing came of it. We continued the attack, and a hot shot from Barber was barely saved. Sheen now woke up, and play was transferred gradually into our half, and a mistake on the part of Wilson, our left back, let their centre have our goal at his mercy, and thus encouraged Sheen soon scored a second point. Guy's then realised matters, and for the rest of the first half attacked hotly, and on one occasion had very bad luck, a hot shot by Norton hitting the cross-bar and bounding back into play. After a tight scrummage in front of goal, a corner was conceded, but nothing came of it, and the sides crossed over with the score standing at 2–0 in favour of Sheen.

We kicked-off on restarting, and after a few minutes level play, Norton, who was playing a very strong game, put in a good piece of individual work, ending up with scoring our first goal. Sheen then put in one or two warm shots, but Collins, who played an excellent game in goal, was more than equal to the situation, and defended his charge well. Soon after, another good piece of individual work, this time by Barber, ended in our equalising matters, the score standing 2–2. The game now became exciting, but Sheen had slightly the best of the exchanges, and managed to score a winning goal, and previously to this all but scored another, Collins saving brilliantly. We tried hard to equalise, but were unable, and the teams left the field with the score standing 3–2 in favour of our opponents.

The forwards seem to lack combination, the centre being very weak and the outsides failing to show such good form as in the match v. St. Thomas'. Both our goals were the result of good individual play, by Norton

and Barber, who both played well, though Barber was very inclined to be selfish. Our defence was good and but for that first unfortunate mistake on the part of the left back, which let Sheen in to score their first goal, we might and should have probably won. East Sheen may certainly congratulate themselves on having come out of the engagement as well as they did. Team :—

Guy's.—E. A. Collins (goal); W. M. Robson, A. R. Wilson (backs); H. Bacon, I. Goss, N. P. Shepherd (half-backs); A. Crofts, H. Barber, T. A. Chignell, E. L. Norton, T. F. Wilson (forwards).

Lawn Tennis.

The annual general meeting of the Lawn Tennis Club was held on Wednesday, January 23rd, Mr. Lane being in the chair. The secretary presented his report, which stated that last season had been a fairly satisfactory one. Of sixteen matches arranged, eight were won, five lost, and three not played. In the Inter-hospital Cup, we again had the misfortune to meet the winners, Bart's, in the first round, and met with a rather severe defeat. The secretary expressed a hope that the captain of the second team would meet with more support in the coming season than he did in the last; and that a determined effort would be made to win the Cup, which Dr. Washbourn presented. The courts promise to be in excellent condition next year, the opening of three additional courts having had a good effect by giving an occasional rest to the others. The report having been adopted, the following officers were elected for the coming season :—President: Mr. Arbuthnot Lane; Vice-President: Dr. Washbourn; Captain: E. N. Jupp; Hon. Sec.: B. H. Wedd; Committee: P. S. Mandy, H. K. Lacey, J. S. Steele-Perkins, H. Davies-Colley, H. Bacon, W. L. M. Day, C. D. Pye-Smith.

Royal College of Surgeons.

COURSE OF LECTURES FOR 1901.

Lecture Hour 5 o'clock p.m.

February 18th, 20th and 22nd.—Walter Edmunds, Esq. (Erasmus Wilson Lecturer), "The Pathology and Diseases of the Thyroid Gland."

February 25th, 27th and March 1st.—Dr. T. G. Brodie (Arris and Gale Lecturer), "The Vascular and Muscular Mechanisms of the Lung, and the action of Drugs upon this Organ."

March 4th, 6th and 8th.—Prof. Christopher Addison, "The Topographical Anatomy of the Abdominal Viscera in Man."

March 11th, 13th and 15th.—Prof. Percy Furnivall, "The Pathology, Diagnosis and Treatment of the various Neoplasms of the Stomach and Intestine."

March 18th, 20th, 22nd, 25th, 27th and 29th.—Prof. C. Stewart, LL.D., F.R.S., "The Protection and Nourishment of the Young of the Vertebrata, and some new additions to the Museum."

Appointments.

CIVIL.

Constant, Frederick, L.D.S. Eng., has been appointed Honorary Dental Surgeon to the Gravesend Hospital.

Holmes, Thomas, M.B. Lond., has been appointed District Medical Officer, Lancaster Union, *vice* G. R. Parker, resigned.

Lister, Thomas David, M.D. Lond., M.R.C.P. Lond., has been appointed Assistant Physician to the Royal Hospital for Children and Women, Waterloo Road, London.

Nason, J. J., M.B. Lond., M.R.C.S., has been appointed Honorary Consulting Surgeon to the Hospital, Stratford-on-Avon.

Sarjant, F. P., M.B. Lond., L.R.C.P., M.R.C.S., has been appointed District Medical Officer, Chorlton Union, *vice* B. J. Massiah, deceased.

Todd, D. B., L.R.C.P. Lond., M.R.C.S., has been appointed Public Vaccinator by the Westbury Rural District Council.

Carter, A. H., M.D., B.S. Lond., L.R.C.P., M.R.C.S., has been appointed Medical Officer, Imperial Yeomanry Hospital, Pretoria, South Africa.

Clapham, Crochley, M.D., F.R.C.P.E., has been appointed Consulting Physician to the Royal Hospital, Sheffield.

Clapham, Stanley C., M.B., B.S., L.R.C.P., M.R.C.S., has been appointed Assistant Medical Officer to the Grove Hospital, Lower Tooting, S.W.

Goadby, Kenneth W., L.R.C.P. Lond., M.R.C.S., L.D.S. Eng., has been appointed Senior Dental Surgeon to the Seamen's Hospitals, London.

Handley, W. S., M.S., M.D. Lond, F.R.C.S. Eng., has been appointed Surgeon to Out-patients at the Samaritan Free Hospital for Women and Children.

Jones, Charles Sturges, M.R.C.S., has been re-appointed Medical Officer of Health for Chichester.

Leathes, J. B., M.B., B.Ch. Oxon., F.R.C.S. Eng., has been appointed Assistant in the Department of Pathological Chemistry, Jenner Institute of Preventive Medicine, London.

Mullins, Reginald C., has been appointed Medical Officer, Imperial Yeomanry Hospital, Pretoria, South Africa.

Tubby, A. H., M.S. Lond., F.R.C.S., has been appointed Consulting Surgeon to the Vine Hip Hospital, Sevenoaks, *vice* William Anderson, deceased.

Papers by Guy's Men.

A Singular Case of extensive deposit of Phosphate of Lime in the Lungs. By Theodore Fisher, M.D., Lond., M.R.C.P. Lond.—*The Lancet*, 26th January.

A note on the staining of Blood-films. By W. C. C. Pakes, Bacteriologist to Guy's Hospital—*Clinical Journal*, 23rd January.

The Position of Radiography in Medicine. By Edward W. H. Shenton, Radiographer to Guy's Hospital.—*Ibid.*

A Clinical Lecture on a case of Chronic Cancer of the Face. By F. T. Paul, F.R.C.S., (Illustrated).—*British Medical Journal*, 9th February.

With Dr. Lauriston Shaw in the Out-Patient Department of Guy's Hospital.—*Clinical Journal*, 6th February.

Ed.—L. E. S.

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NOTICE TO CORRESPONDENTS.

The Editor wishes it to be understood that no communications can be inserted which are not guaranteed by the name of the sender. All articles must be written on one side of the paper only.

Calendar of Coming Events.

March, 1901.

Sat. 2.—Messrs. Jacobson and Fripp's take-in; Drs., F. L. Thomas and W. Collins Lewis; Cl., H. S. French.
1 p.m., Clinical lecture by Dr. Taylor.
G.H.R.F.C., I., Marlboro' Nomads, away.
II., Polytechnic, away.
G.H.A.F.C., I., Surbiton Hill, away.
II., Surbiton Hill 2nd XI., home.

Mon. 4.—1.15 p.m., Clinical lecture by Mr. Higgens.

Tues. 5.—Application to Medical School Office for Schedules for 1st and 2nd Conjoint Exams. to be made not later than this date.

Wed. 6.—1.30 p.m., Clinical lecture by Mr. Jacobson.

Thur. 7.—Messrs. Howse and Symonds' take-in; Drs., J. M. M. Ommanney and G. B. Soper; Cl., N. F. Ticehurst.

Fri. 8.—April Appointment List closed.
4 p.m., Meeting of the Dental Society.

Sat. 9.—1 p.m., Clinical lecture by Dr. Taylor.
8 p.m., Meeting of the Physical Society.
G.H.R.F.C., I., Richmond, away.
II., Marlboro' Nomads, home.
G.H.A.F.C. I., Godalming, away.
II., Kenley (reserves), away.

Mon. 11.—1.15 p.m., Clinical lecture by Mr. Laidlaw Purves.
Exam. for Arthur Durham Dissection Prizes.

Thur. 14.—Messrs. Lucas and Lane's take-in; Drs., H. Barber and A. H. E. Wall; Cl., F. Curtis.

Sat. 16—1 p.m., Clinical lecture by Dr. Taylor.
G.H.R.F.C., I., London Irish, home.
II., London Irish, away.

Guy's Hospital Gazette,

MARCH 2, 1901.

On Some Practical Points concerning Lupus Vulgaris, especially with reference to its Treatment.

CLINICAL LECTURE BY W. H. A. JACOBSON, M.Ch.
February 13th, 1901.

Before the lecture a woman, æt. 60, was shown who had been the subject of Lupus Vulgaris for forty-five years. The disease had begun by attacking the right ear when the patient was fifteen. For six or seven years the treatment was by ointments. At twenty-three the patient attended at the Cancer Hospital, where lotions and ointments were continued. When she was twenty-eight, the disease reached the right cheek. Next came two years of Mattei treatment. Some years later the patient attended at the British Dispensary for Diseases of the Skin, and now, for the first time, vigorous treatment seems to have been adopted. "A thick treacly stuff having been painted on which caused much burning pain," probably zinc chloride. Then came an interval of two years' treatment with the thyroid extract. Seven years ago the patient came under Dr. Pye-Smith's care in Mary ward, and treatment by erasion and linear scarification was then adopted, and had been carried on since at intervals. In addition to the combined ulceration and scarring, and the obstinacy so characteristic of the disease, the following points were demonstrated. On the ear, attacked at an early age, when the activity of the disease and the power of repair had been most pronounced, healing was sound but the deformity very marked, the helix being completely destroyed. On the adjacent part of the cheek where the zinc chloride had been used, the resulting scar was perfect, white, thin and supple. Further forwards, where curetting and linear scarification had been used in combination to the cheek and lower eyelid, the scars were almost as good. But to achieve this result anæsthetics had been given six or seven times. The disease still persisted in the lower third of the nose, in the diffuse form known to the Germans as Volkmann's Lupus Seborrhagicus. This was explained by the large sebaceous glands here met with, the terminal circulation, the exposure to cold and the liability to moisture and the irritation by pocket-handkerchiefs. But at present—and at

this time of year what was left of the disease would show itself at its worst—there was no ulceration and no scabbing. The lupus had been treated by linear scarification only, a method well adapted to cases where, as here, the deposit took a diffuse, widely spread form, not that of localised nodules, and where the tissues were thin in structure. Stress was laid on the advantage of rapid healing secured after linear scarification, with but little pain, owing to every minute slice having still a layer of epithelium on it. On the other hand, the weak point about scarification was insisted upon that it did not do enough. Finally, the case showed that, while a cure in the true sense of the word was probably not attainable when the patient only came under regular surgical treatment at fifty-three, with Lupus Vulgaris then of thirty-eight years' standing, very much could be done in such a case, the recurrences becoming fewer and taking place at longer intervals, and destruction of features as important as the lower eyelid and nose, being prevented.

Gentlemen,—I have chosen this subject for my remarks to-day on account of its frequency, its attacking all ranks of life, though especially the poorer only, the terrible mutilation which it may bring about, and, lastly, because I feel that in spite of its frequency, in spite of the hideous deformity which it may cause, this disease is a discredit to our profession, and the results attained to-day, as to any permanent and thorough cure, are little better than those of twenty years ago, especially when we consider the advances of surgery in this time.

Lupus vulgaris is one of the forms in which tuberculosis attacks the skin; it may be briefly stated to be "consumption, or phthisis of the skin." If the remarks I have just made as to lupus vulgaris being a discredit to our profession seem too strong to any of you, compare for a moment the results we obtain constantly in this hospital with another tubercular affection, tubercular arthritis of the knee. Here complete recovery from the local disease is the rule after erasion or excision, or a combination of the two. The limb is shortened and stiff, but useful, and no local recurrence takes place; the patient though crippled somewhat is able to follow any sedentary occupation, and, if attention is paid to those common-sense rules of leading a life in which every attempt is made to keep up the general health and vitality of the patient, and to avoid injuries to the joint operated on, the life may be long and useful, and there may be no token to others that the patient has had any local form of tuberculosis beyond a limp in the gait or a high boot.

How different is the case in lupus! Here we have a form of tuberculosis attacking not a joint, but the skin, usually that of the face, obstinate to a degree, slowly extending over the features, marring these with scabs, and especially destructive about the most notable features, the mouth, the nose, the eyelids. Thus it converts the supple, mobile lips into a fibrous ring of scar tissue, showing here and there exquisitely tender ulceration, especially at the angles; it lops off the cartilaginous end of the nose till this is disfigured into a bird-like beak, with the normal wide and patulous orifices changed into narrow fibrous holes, with the ordinary noiseless breathing converted into a whistling noise, drawing additional attention to the disfigurement of the unhappy patient, and additionally marking him out as one set apart from his fellows; lastly, when the lower eyelid is reached, this thin and supple structure, instead of lying close against the eyeball so as to keep its part of the lachrymal apparatus in working order, instead of being freely mobile so as to play its part in protecting the eyeball, is disfigured into an unshapely puckered mass of scar, immobile and everted, and thus leading to escape of tears over the face, a constant source of annoyance to the patient, while the frequent trickling keeps any lupus patches over which the fluid flows moist and irritated, and thus intensifies their natural obstinacy to treatment.

The causes of the results of the treatment of lupus vulgaris being less satisfactory than in others of the more superficial tuberculoses are the following. Till lately its true pathology as a tubercular affection of the skin has been overlooked. As lately as 1891, Mr. J. Hutchinson, whose position as an authority on diseases of the skin, and also as one of our leading surgeons, is absolutely unrivalled, spoke in his lectures on "the Nature of Lupus" (*Lancet*, Jan. and Oct., 1891, pp. 125, 181, 237) as follows: "In making these remarks I am far from wishing to ignore either the general impressions or the collected facts which favour the belief that there is some bond of connection between tubercular affections and lupus. What I contend for is that it is far less close than is generally believed." And again, "We have seen that there is no evidence that it ever begins from the implantation of tuberculous matter, that it is only exceptionally associated with tubercle in the viscera, and that it never causes infective gland disease. We have seen also that its remarkable preference for certain regions and

parts seem to imply that the influence of cold is by far the most common of its exciting causes. I may own that the source of the evidence seems to me much in favour of the belief that lupus is a specialized form of chronic inflammation rather than the result of infection." While, as far as our profession is concerned, I am far from agreeing with Professor Stewart, who, in his Moral Philososophy, teaches that reverence for great names is one of the chief hindrances to the spread of real knowledge, I cannot but see that an opinion like the above coming from Mr. Hutchinson, with all the weight that his writings carry, was scarcely calculated to impress his hearers with the need of thorough and sustained watchful treatment, which Lupus Vulgaris, in common with all other surgical tuberculoses so urgently calls for. Then the results of the treatment, owing to the nature of the localities which lupus vulgaris usually attacks, sites which do not admit of operations on a wide and striking scale, localities which account for the obstinacy of the disease and its liability to relapse are another reason for cases of lupus being but little welcome, and being too often left for treatment in the out-patient room. Again, lupus vulgaris is one of those diseases of the skin which should be looked upon as a surgical tuberculosis, and should be treated by surgeons on the same lines as other tuberculoses, which can be got at, are dealt with, and not left to physicians and dermatologists.

Lastly, patients must bear some of the blame for the unsatisfactory results attained. Even when due allowance is made for the fact that the true nature of the disease has not been sufficiently impressed upon them, the sensitiveness of the parts usually attacked and the disheartening obstinacy of the disease lead them much too often to defer and neglect the repetition of the treatment which is here, as in other surgical tuberculoses, so urgently required.

Let us examine *some practical points in the pathology, causation and treatment of lupus*, which account for this form of tuberculosis standing so far apart from the common forms of the same disease in its inveteracy, its distressingly mischievous results, and the poor results of treatment.

First as to the pathology of lupus. It will be well to begin with a definition. Something of this kind will serve, "Lupus vulgaris is one of the varieties of tuberculosis of the skin, the mischief usually commencing in the corium, and being due to a bacillus indistinguishable from that of tubercle. It is characterised by its obstinacy and combined ulceration and scarring."

I have spoken of this disease being one of the varieties of tuberculosis of the skin. The following classification may be useful to you at examination-time and in practice—it is given by Dr. Wild, Physician to the Manchester and Salford Hospital for Skin Diseases, in an interesting and suggestive paper on "Cutaneous Tuberculosis," *Medical Chronicle*, vol. vi., N.S., p. 416.:—

A. *Primary tuberculosis of the skin* usually due to inoculation from without:

1. Lupus vulgaris.
2. Lupus verrucosus.
3. Verruca necrogenica.
4. Tuberculosis verrucosa cutis.
5. Acute tuberculous ulceration.

B. *Secondary tuberculosis of the skin*, due to direct extension from within:

Skin involved by extension from
Tuberculous joints or bones.
Tuberculous glands.
Subcutaneous tuberculous nodules.
This is the chronic superficial abscess of early life.

C. *Doubtful tuberculous lesions:*

Lupus erythematosus.
Tuberculous eczema.
Lichen scrofulosorum.

If you ask for proof of the tubercular nature of lupus vulgaris, the two following are sufficient. Koch obtained a pure culture of bacillus tuberculosis from lupus. This culture resembled in every way cultures from other instances of well recognised tubercular disease. He carried this culture through fifteen generations, and with the fifteenth he inoculated five guinea-pigs, producing tuberculosis in all.

Another proof is afforded by the inoculation of portions of lupoid tissue in the peritoneal sac or in the subcutaneous connective tissue of guinea-pigs This has been followed by tubercular lesions in a sufficient number of cases to be conclusive. That it has not always succeeded is readily accounted for by the small number of tubercle bacilli met with in lupus vulgaris (*vide infra*), a fact which is explained by the part of the skin usually attacked not being at all suitable to the ready multiplication of these bacilli (*vide infra*).

Stages of lupus.—It begins, as you know, in the form of one or more small round browish-red or pink and semi-transparent masses, the size of small shot or hempseed, gradually increasing in size and running together. If there is any doubt as to whether one of these

little masses is really present, pressure with a piece of glass—a microscope slide will do—will help you, as this removes the hyperæmia, but not the nodule itself. (Unna.) The nodules are situated usually in the deeper layers of the corium, especially that of the face and hands. How do they get there? As in hospital practice we do not see these cases till an advanced stage, it is of the utmost importance that general practitioners, who are more likely to come across the earlier stages, and to be in a position to find out about the patient's surroundings, should note, and notify by publication, any instances which can be authenticated of the mode of inoculation of lupus.

Let me instance a few. Lupus vulgaris attacks chiefly exposed parts, such as the face and hands, much more rarely the parts covered, whether by hair or clothes. This fact is strongly suggestive of an inoculation from without.

A girl, æt. 18, was sent to me by Dr. Phillips, of Bedford, with lupus verrucosus, or the warty form of lupus, of which I shall speak shortly, on the left index finger. There were three typical patches of lupus vulgaris on the dorsum of the wrist and the lower part of the forearm. The wart, which had been scabbed (*vide infra*), was treated by nitric acid under an anæsthetic, and healed quickly and soundly. The patches of lupus vulgaris required curetting and the use of fine points of silver nitrate to the persistent nests in the corium before they, also, healed satisfactorily. These places remained healed two years later. On enquiry we learnt that this patient spent much time at needlework in the society of a coæval and close friend, herself consumptive. The original lupus patch probably owed its origin to the prick of an infected needle. A clergyman, working in one of the northern dioceses, rich in pit-villages, came under my care with a similar condition of lupus verrucosus about the root of the left thumb-nail. The dorsal surface of the wrist and lower part of the forearm showed three ulcerating patches of lupus in the second stage—that of mixed infection, with the flabby granulation, the undermined edge, the yellowish-brown scabs and crusts, and, here and there, in the margins scars with scattered nodules of the so-called "apple jelly" material. The history here pointed to a trifling sore at the root of the thumb-nail, probably a "hang-nail." As a clergyman in the diocese to which he belonged he was assiduous in his visiting. Amongst his sick had been more than one case of "consumption." It is not, I think, unreasonable to suppose that here there had been abundant opportunities for the inoculation of a trifling sore with tubercular material, perhaps sputum, in the small and probably not too well-ventilated rooms of the houses in a colliery village. The patches of ulcerated lupus near the original trouble yielded to curetting and excision, and remained sound. But I am not sure, from one letter which I have received, that the primary lesion has ever soundly healed, though the patient was warned as to the nature of the disease, and the need of attending to it and keeping the thumb covered. I may add that he came to me towards the end of his short holiday, and has not reported himself to me at regular intervals as he was urged to do. Leloir, a French writer, whose writings are most instructive, watched the following case. A little child had a patch of ordinary eczema on one cheek. The mother, herself suffering from phthisis, poulticed this, and with, perhaps, affectionate but certainly pernicious nastiness, used her own saliva in the making of the poultices. The originally innocent patch of eczema became a typical one of lupus vulgaris. One more case is of especial interest from the way in which it happened and the way in which it is reported. Several years ago, in the eighties of the last century, a dispensary was started at Leipzig and attached to the University; it is now called the University Dispensary, is well appointed, and students are encouraged to watch cases and to study them as subjects for theses. I could wish that in England the Universities which require theses before granting medical degrees took a like course. Dr. M. Schmidt reports the following case, which I have only time to give very briefly. A healthy woman was accidentally bitten on one lip by her dying and phthisical husband. Very shortly after, she pricked her finger, and probably licked it. In both places nodules of lupus appeared. They were treated by excision, and, on microscopical examination, were proved to be tubercular.

Dr. Wild in his paper, to which I have already referred, states that he has seen two cases of lupus of the lobule of the ear following perforation for ear-rings. As there is a well-known German case in which a healthy girl developed tuberculosis, which proved fatal, from her having her ears pierced for ear-rings which had been given her by a friend dying from tuberculosis, it is probable that in Dr. Wild's cases the inoculation was of a like character. Dr. Wild also mentions other recorded cases of lupus thus inoculated from without. In one, lupus arose in the cracks and fissures on the lips of a little child kissed

by a phthisical mother. In another, a patch of lupus appeared on a tatoo-mark which had been moistened by the saliva of a phthisical operator.

Gentlemen, I mention these cases as some of the many and varied instances in which this most important disease may arise in trifling ways, because you in general practice will be much amongst the classes who live most under the conditions of life which afford every opportunity for tubercular infection, and who, as a rule, take no precautions to guard against it. Much yet remains to be done in the way of prevention of tuberculosis. In a few years' time it will be for you who sit upon these benches to-day to point out the hosts of ways in which the infection of tuberculosis is brought about and spread, and if you use your opportunities aright, your lips, in pointing out how that infection may be met, will carry a weight and authority which no others will possess. I shall refer again to this matter a little later. Having alluded, though briefly, to some authenticated instances of the ways in which the tubercular virus is, in Lupus Vulgaris, inoculated from without, I will pass on to suggest three others.

1. *Communication by flies.*—A patient has a slight abrasion, trifling injury or sore, a bruise, or insect-sting on the face. On this a fly, the carrier of tubercle, settles. Some years ago Spillman, of Paris, and Hoffman, of Dresden, showed that it was possible for flies to carry with them the contagion of tuberculosis. From a house where a patient, whose sputum had contained great quantities of tubercle bacilli, died, Dr. Hoffman took home some flies and examined them. He found bacilli in their excreta, which covered the walls of the house in numerous specks, and also in their intestines. Other flies, apparently healthy, he fed with tubercular sputum, and found that in a few days a large number died, the chandeliers being covered with dead flies. Lastly, to determine the vitality of bacilli transmitted by flies he inoculated these bacilli into the anterior chambers of the eyes of guinea-pigs. Of five experiments four were without result. In the remaining one a large number of fresh small tuberculous masses were found in the lungs, liver and spleen. The question of the vitality of the bacilli transmitted by flies must, therefore, be probably answered in the affirmative, and it is not unreasonable to suppose that if a fly from a tubercular room settled on a trifling sore or abrasion of the face, this might become the seat of tubercular mischief or lupus vulgaris.

Another instance: a patient has one of those trifling cracks or abrasions to which the face and hands are so liable; the mother of the patient is a washerwoman. Amongst the many handkerchiefs which she takes in, it is fair to suppose that some will be those of tubercular patients. The rooms are small and ill-ventilated, the washing and drying facilities are poor. We all know the tenacity of life of the tubercular bacillus,* how it survives other microbes which may be associated with it, as we see too often after opening a tubercular abscess, the seat of mixed infection.

We know also that neither drying nor putrefaction even destroy at once the tubercular bacilli, while both processes allow of the bacilli being distributed through air or water. Is it unreasonable to argue that in such a house where these bacilli will be frequently present, with a patient of poor vitality, poorly nourished, with a sore of the face or hands occurring at a time when cold and trying winds are about, tubercular infection may easily take place, and Lupus Vulgaris result?

It would be very easy to multiply such instances of the way in which lupus may begin but time presses, I will give but one more.

A third patient has a trifling sore on the face or hand. It is considered not worth while to trouble the doctor with it. The surroundings here are, at first sight, better, the parents, perhaps, are farmers in a small way, and keep a dairy. As some of you, who live in the country, know, perhaps, it is not very unusual in the country to wash sores with milk, skimmed no doubt, but not boiled. Now, it is a fact that though tubercular disease of the human mamma is very rare, this is not the case with the udder of the cow. Where the dairies are on a large scale, well conducted and regularly inspected, tubercular infection by milk is uncommon. But it is a very different thing in the country, especially in the more thinly populated parts, where the cowhouse is badly ventilated and unhealthy, with a damp subsoil, and the visits of the inspector or veterinary surgeon perhaps few and far between.

I have spoken here chiefly of tubercular sputum. I would remind you that tubercular bacilli are present in other discharges, though much less abundantly, *e.g.*, from tubercular glands, from tubercular bones, joints, long-standing anal fistula, chronic ozæna, chronic tonsillitis

* Schill and Fischer have shown that in dried tubercular sputum the micro-organism is still vital up to a period of 140 days.

and adenoids, and, still less abundantly, in the discharges from tuberculous intestines, kidneys, and bladder. Drying up of any of these liquids will disperse in the dust tubercular bacilli, though it may be only a few.

I have dwelt somewhat upon these varied ways in which Lupus Vulgaris, a tubercular disease of the skin, does actually and may, perhaps, begin by an inoculation from without as such points have a bearing upon one of the chief questions of the day which are asking for answer. I allude to the best means of the prevention of tuberculosis. And amongst these will come up one very burning question with which you, as the rising generation will be called upon to deal. I refer to the notification of tuberculosis. Now, notification of disease can, of course, be of two kinds, it may be voluntary, or it may be compulsory. The former will never bear much fruit. With regard to compulsory notification of tuberculosis, were I just entering on general practice, I should greatly dislike its introduction. The compulsory notification of acutely infectious disorders, such as scarlet fever and diphtheria on the one hand, and that of tuberculosis on the other, do not, it seems to me, run on parallel lines. I refer to the difference in the rapidity of recovery, the facility of isolation and disinfection, and the amount of interference and its effect on the life of the individual in each case. But if I am right in my opinion that voluntary notification will be useless, and that compulsory notification will be evaded by the public and will also be disliked by the profession from reluctance to interfere and to take steps which will practically brand tubercular patients as a danger to the public, then, gentlemen, it will still more be our duty to do our best with other preventive measures, to be on the watch for the different causes of tubercular infection, to recognise every form of the disease which has infective and preventible lesions about it, and to put the vital importance of these before our patients. And amongst these sources of infection with preventible lesions of its own is lupus.

To return to the skin, and the early stage of lupus vulgaris. The earliest stage of lupus vulgaris consists, as in other forms of tuberculosis, in the stage of deposit of the virus which gradually take the form of one or more small hempseed-like masses of reddish-brown or apple jelly colour. If one only appears to be present, careful examination will often detect the presence of satellites, a very important piece of evidence in the diagnosis* of lupus. Now, gentlemen, talk of "apple jelly" or "barley sugar" nodules by all means if you like, but remember what you mean by so talking. Such nodules are nothing less than little masses of tubercular infective granulation tissue. Microscopically we have in these deposits the same elements as in tubercle elsewhere, but with marked differences. Thus we find giant cells, but few and only occasional; tubercle bacilli in and around them, but very few and very occasional, so much so that it may require the making of thirty-five or forty sections of the patch before the bacilli are found. Thus, in two cases Koch himself had to cut in the one case twenty-seven, and in the other forty-three sections before any bacilli were found. Around the giant cell are the usual epithelioid cells, and, outside these again, the zone of lymphoid or granulation cells. Now it is this last constituent of tubercle which is most marked in lupus, so marked as to mask the few giant cells and bacilli present.

Where the patient's vitality is fair, where the skin is cleanly, the progress of this first stage of lupus may be exceedingly slow, almost indefinite, and therefore is usually neglected. In such cases, as is the rule in tubercle, where the resisting power of the individual attacked is fairly good, much development of fibrous tissue may occur, the so-called lupus scars may form, skin, glands and hair follicles will be obliterated, but the papillary layer and epidermis will remain intact. But the disease is still there, because these scars contain scattered foci of tubercular material, especially the granulation cells. Now I want you to note the reason of this persistence and liability to

* The following were given as the chief points in the diagnosis of lupus vulgaris:—

1. The duration of the disease.
2. The age at which it began. In early life the skin of the face is more delicate; it is more liable to trifling abrasions, cracks and sores.
3. Any evidence of combined persistent ulceration or scarring.
4. Any traces of the so-called "apple-jelly" nodules, in reality infective, tubercular granulation tissue, especially in the periphery of the suspected lupus.
5. Examine the mucous membranes when dealing with a skin lesion possibly lupus vulgaris, and especially the mucous membranes of the gums between the incisor teeth and that over the palate.

The three following are mainly of assistance in the diagnosis of lupus from syphilis.

6. The effect of drugs.
7. In lupus the amount of destruction brought about takes much longer than that of syphilis.
8. The sores of lupus show much less tendency to be grouped in segments of circles, or to be serpiginous; lastly, as a rule, they are not pigmented.

reappearance of lupus, whether spontaneously or after imperfect operation. This granulation-tissue is here in the skin that same infective granulation-tissue, which, next to the bacilli themselves, is the distinguishing feature of tuberculosis. We see it in tubercular glands, in tubercular osteitis, in tubercular arthritis as in a "pulpy" knee. In every place, however widely different, this granulation-tissue is of the same type, it is slow, obstinate and persistent, prone to break down, especially if the seat of mixed infection, but equally characterised by its great destructive power, making its way in every direction as we frequently see by its effects in removing the cartilage from the end of the bones of the knee-joint, boring its way into the cancellous tissue of long bones such as tibia, or bones like the spine, in tubercular osteitis.

Here in the skin we have the same characters, especially that of obstinate persistence and spreading, in the tubercular dermatitis known as lupus vulgaris.

And this brings us to the *second stage*.

We have seen that in the first stage the tubercle bacilli start the mischief by infecting some slight abrasion or sore, thus entering by an "infection atrium." Very slowly they reach the corium. How they reach it is not yet explained. A suggestion on this point will be made later. The central layers of the corium are at first invaded, after a time the upper or papillary layer is attacked owing to the gradual extension of the above small cell infiltration or granulation-tissue on which I have laid stress, an obstinate slowly persistent extension very characteristic of the tissue. The epidermis at a corresponding point, its nutrition being affected, becomes detached, leaving at first a minute defect, from which a serous fluid escapes (Norman Walker). As soon as the underlying granulation-tissue has been thus exposed to infection from without, infection with pus-microbes occurs, and the natural tendency of the ill-vitalized infective granulation-tissue to break down is hastened as the granulation cells are now rapidly destroyed by the pus-microbes and their ptomaines, and come away as pus corpuscles. These collect, and exposed to the air, dry on the surface of the ulcerating patch as the familiar, dirty yellow crusts; and the disease, which up to this time has been merely, while in the first stage, that of a deposit of hempseed-like reddish brown nodules, a mild disfigurement, and one to which, owing to its very slow changes, the patient's friends have become accustomed, changes from a mere deformity into a most disagreeable, discharging and destructive disease.

While this occurrence of mixed infection or the disease reaching its second stage is of chief importance, marking as it does a change from insidious slowness to rapid spreading, from mere deposit to destruction, even as I have said to marring of mouth and nose and eyelid, there are one or two other changes very characteristic of lupus to which I must just allude. We spoke, in our definition, of lupus as characterised by combined ulceration and scarring. While the nodules are breaking down in the centre there is often a certain amount of reactive change in the periphery, a sort of rising up against and attempt to protect themselves on the part of the surrounding corium against the formation and spread of lupus tissue. If in a patient of fair vitality and good surroundings this formation of scar tissue, this power of reaction is well marked, we get what is known as *lupus hyperthrophicus*, or fibrous lupus, but remember that lupus scars, if the spontaneous result of lupus, but not the outcome of careful and repeated surgery, are usually lupus still. In another group of cases it is not the corium which shows the chief reactive changes, but the epidermis—in these cases the bacilli probably get no deeper than the epidermis—here we have the epidermis raised owing to increase in its depth, scales of epithelial cells are heaped on the surface and come away easily, leaving a red dry shining surface. This is *lupus exfoliativus*. One more variety, a limited localised one, and therefore favourable for treatment. Here both the epidermis and the papillary layer of the corium are chiefly affected, the bacilli having only got as far as the papillary or superficial layer of the corium, and a warty growth is the result, but the wart is not a natural one, it is too indurated and prone to be covered by recurrent scabs. Always be suspicious of such warts. This form of lupus is *lupus verrucosus*, closely allied to verruca necrogenica; it occurs chiefly on the hands, not the face. It occurs in porters in the necropsy room, medical men who frequently make necropsies, butchers who handle tubercular meat, and, if in women, such cases as those of a wife tending, and washing the linen of a tubercular husband. This variety of lupus, warty lupus, betokens, I think, three things, probably a patient with a predisposition to warts, secondly, frequent exposure to tubercular infection, thirdly, a patient of fair vitality and resisting power.

You are often troubled with the *number of varieties* into which the books subdivide lupus

vulgaris. I think you will see that these *clinical varieties* of the same disease depend chiefly on the following points:—

(1) The part of the skin which the tubercular bacilli reach, *e.g.*, lupus exfoliativus (epidermis); lupus verrucosus (papillary or superficial layer of corium); lupus vulgaris (deeper layer of corium). (2) The vitality of the patient and the reactive power of the tissues, *e.g.*, lupus fibrosus or hypertrophicus. (3) The part of the face attacked, *e.g.*, lupus seborrhagicus of Volkmann, a diffuse form without any so-called "*apple jelly*" *localised nodules, attacking the* skin over the lower two-thirds of the nose, a region so rich in large sebaceous follicles. It is these follicles which furnish the abundant dirty-looking fatty crusts, which consist of the excessive secretion from the sebaceous glands, crusts which so quickly become the seat of mixed infection and so of rapid destruction. (3) The rate of progress of the disease, the duration of the first stage, and the date at which mixed infection sets in. Thus, lupus non-exedens is, to my mind, only the first stage of lupus vulgaris, that of the deposit and slow early spreading of the tubercular material; lupus exedens marks the supervention of mixed infection, and so the setting in of the second stage where pus-microbes as well as tubercular bacilli play a part in the destruction of the tissues attacked.

I turn now to a few practical points connected with the positions attacked by this important and obstinate disease. I spoke of the face, back of hands, and occasionally the dorsum of the feet being attacked.

Note first that these, especially the first two, are exposed parts—exposed to slight injuries and abrasions, that they are parts exposed to cold, which depresses their vitality, and accounts for the extension of lupus being worst in cold and windy weather, and impresses on us the periods of the year when it is most important to keep the patient under observation. It is easy to see why lupus does not attack the scalp and the palms of the hands, protected as these are with hair and thick epithelium, why it attacks the hands less frequently than the face as the former are much more frequently cleaned, and the feet less frequently than either because these are covered; but why lupus so rarely attacks the forehead and upper eyelid, is not, as yet, explained. That it plays worst havoc in parts so essential to the human face as the mouth, nose, and lower lid is easily intelligible, as here it is kept constantly moist and irritated, and, further, because the discharges from these three orifices are never sterile, and thus we get another source, in addition to the air, of mixed infection. These facts emphasise the importance of preventing lupus from reaching these spots, where its results are so rapid, so destructive, and so disfiguring.

I have spoken of the skin of the face and back of the hands as frequent seats of lupus, and of parts which are well covered being much less frequently attacked. But there is one region which I saw attacked several times when I was seeing out-patients, and which for some time puzzled me. I refer to the nates in young subjects. I have little doubt now that, in some cases, this at first inexplicable fact can be explained by the bad hygienic surroundings, and especially the dirty, much-used water-closets of the poorer classes. When you see a case of lupus of the nates always suspect that the inoculation has come from a closet used by a patient with long-standing fistula in ano. As the Germans teach strongly, many fistulæ in ano are tubercular.

Note also that the first part of the skin usually occupied by the tubercle bacilli is the corium, made up as you know of interlacing bundles of connective tissue, growing denser towards the papillæ and looser as they approach the subcutaneous fat. This fact is chief amongst the reasons which makes lupus intractable. To begin with, the corium being part of the skin, does not lend itself readily to the wide, deep, and thorough operating which is so essential in tuberculosis, because in this form of tuberculosis the disease attacks chiefly the skin of the face and backs of the hands. Again, we shall see, when we speak of treatment, it is the little foci of lupus lurking in the bundles of the corium which persist after the upper softer, broken-down part, the seat of mixed infection, has been curetted away, and which reappear after the wound has appeared to heal with a healthy scar. It is these minute nests of lupus, which, lying in the deeper layer of the corium, come very near to the subcutaneous fatty tissue. Now, in the face, the subcutaneous fat contains muscles, it is closely adjacent to the cartilages and bones, and this militates strongly against success in the treatment of lupus by excision.

One more point of practical importance concerning the pathology of lupus vulgaris has been alluded to, and that is the scantiness of the tubercle bacilli in this form of tuberculosis. Perhaps this is accounted for by the fact that the corium is the part usually chiefly attacked by the bacilli. It is quite possible that the interlacing bundles of this tissue may not be a

suitable soil or nidus for them. Again, we must remember that in the tubercular affection of the skin which constitutes lupus vulgaris, the tubercle bacilli are exposed to light, an agency notoriously hostile to them. Possibly this may explain, in part, why lupus is so additionally active in the more sunless months of the year.

While I have been making these remarks upon the pathology and causation of lupus, several unanswered questions may have risen up in your minds.

(i.) If lupus is a tubercular dermatitis due to invasion from without, how does the bacillus make its way from the surface to the corium? Leloir it is, I think, who suggests that this may possibly take place by the constant movement of the facial muscles.

(ii.) If it be an inoculation from without, why does it not take place even more frequently than it does, especially in those of little personal cleanliness, and exposed from bad hygiene to infection by tuberculosis? The question is partially answered by the fact to which I have alluded, that the skin, especially of the face, is washed at least occasionally, exposed to light, while the dense structure of the corium, is not an ideal nidus for tubercle bacilli. Lastly, perhaps, the skin of the face is very vascular, and thus one in which phagocytosis and destruction of bacilli takes place freely.

(iii.) How is it that lupus, a tubercular dermatitis, does not infect the lymphatic glands, knowing as we do that a very small sore, if existent long enough, whether on the face or the foot, will set up a septic adenitis, and that this adenitis very frequently becomes tubercular? To these three questions there are, to my mind, no satisfactorily complete answers. We want more light, and must wait for it. It will come.

(To be concluded.)

Papers by Guy's Men.

A Case of Subacute Glanders. By John Fawcett, M.D., M.R.C.P. Lond.—*The Lancet*, 16th February.

Abstract of an Interim Report on Yellow Fever. By the Yellow Fever Commission of the Liverpool School of Tropical Medicine. By Herbert E. Durham, M.B., B.C. Cantab., F.R.C.S. Eng., and the late Walter Myers, B.Sc. Lond., M.B., B.C. Cantab., L.R.C.P. Lond., M.R.C.S.—*Ibid*, 23rd February.

Remarks on the Conclusions of the Anæsthetics Committee of the British Medical Association. By George Eastes, M.B., F.R.C.S.—*British Medical Journal*, 23rd February.

A Note on the Phenyl-Hydrazine Test for Sugar. By G. Leslie Eates, M.B., B.Sc.—*Ibid.*

A Case of Latent Appendicitis leading to Suppuration in the Liver.

The patient was a woman, forty years of age, who usually enjoyed good health, but had been subject to "bilious attacks." She sought advice on November 17th last for pain in the abdomen, for which no obvious cause could at the time be found.

On November 20th she had a rigor which lasted ten minutes, the temperature at the time being 102·5°. She vomited several times.

22nd. There was another rigor, which lasted half an hour. The abdominal pain was more severe, and pain in the right shoulder was complained of.

24th. There was some flatulent distension with tenderness all over the abdomen. The liver was not sufficiently enlarged to attract attention, and there was no special pain or rigidity in the neighbourhood of the cæcum. She was troubled with retching; nothing but clear mucus resulting. The bowels were open, and there was no lack of bile in the motion; the urine was muddy with lithates, but contained no albumen. The temperature was very irregular, varying between normal and 102°.

28th. The liver was noticed to be enlarged, and during the next few days, the liver dulness increased rapidly, both upwards and downwards; at the same time, the pain left the rest of the abdomen, and became restricted to the neighbourhood of the liver and the right shoulder.

On December 2nd, the liver dulness extended from the nipple to the level of the umbilicus. It was determined to explore. A needle was introduced just behind the anterior axillary line, in the seventh intercostal space. A cavity was entered almost immediately and sweet cream coloured pus was drawn off.

When the patient was turned on her left side for the introduction of the needle, the area of dulness in the right axilla decreased in a marked degree, retreating downwards to such an extent, that the spot at which it had been proposed to introduce the needle became resonant. This alteration in level of the axillary dulness is an important diagnostic point. The dulness due to a basal empyema varies very little with a change in position of the patient, whereas the dulness due to a liver abscess, pushing up the diaphragm, varies greatly in height according to the patients' position, except when the abscess is actually pointing through the chest wall.

It was determined to open the abscess without delay. Ether having been given, the eighth rib was exposed and an inch an a quarter of it excised. The pleural cavity being opened, it was found that the lung was pushed up, and the diaphragm lay in close contact with the chest wall. Gauze packing was introduced all round, between the costal and diaphragmatic layers of the pleura, with the object of exciting the formation of adhesions between the two, and the diaphragm was divided for a good inch,

the liver being exposed at a part where it was uncovered with peritoneum, that is to say, at a spot close behind the reflection of peritoneum from the under surface of the diaphragm, on to the upper surface of the liver to form the right coronary ligament.

At this stage, the operation was stopped in order to give time for the shutting off of the pleural cavity from the wound, by the formation of adhesions. The whole wound was packed with gauze and a bandage applied.

Three days later the abscess was opened without any anæsthetic, and without much pain to the patient. Dressing forceps were pushed through a thin layer of liver into the abscess, and the opening thus formed, was dilated with the finger. A pint of pus escaped. A large tube was put in, and a copious dressing applied.

The expected improvement did not follow this operation. The temperature kept up, and the patient gradually lost strength and flesh. Repeated punctures were made (about eleven in all) with a view to discovering a second collection of pus, but without result. Thirty-six days after the operation, the patient died.

Post-mortem—The track of the drainage tube through the right pleural cavity was sound and watertight. There was clear fluid but no pus in the right pleura. There was no general peritonitis, but the liver was firmly adherent to the diaphragm. At the back of the right lobe of the liver was an abscess cavity of the size of a hen's egg—the cavity which had been drained. Scattered in groups over the rest of the liver were very numerous little abscesses, having a diameter of about a quarter or a third of an inch. Large tracts of the liver were quite free from abscesses, and in other places a dozen little ones would be found close together, as though they had originated from septic emboli carried in the blood-stream and distributed in small branches of the portal vein. The pus they contained was bright green in colour.

Besides the large abscess and the many small ones, scars were found in the liver in six or seven different places which had become calcified. They could only be cut through with difficulty. These calcified scars were thought to be probably the remains of abscesses which had formed and been absorbed years before. There were half a dozen small abscesses in the lungs.

With the object of finding a cause for this condition of portal pyæmia, the appendix was examined. It lay quite free under the cæcum, with a mesentery of its own about one inch broad. There was no peritonitis about it and no adhesions. Not till the appendix had been removed from the body was any abnormal condition discovered. Lying against its distal end, and under its peritoneal covering, was a little mass which looked like a small lymphatic gland. On incision it proved to be a thick-walled abscess containing about eight drops of pus and communicating with the lumen of the appendix, which also contained pus. The proximal end of the appendix was blocked by a very hard concretion. It seems probable that suppuration in the appendix had been going on for years, and that on three separate occasions septic emboli found their way from the appendix to the liver. The first of these would have caused the several abscesses which had dried up to form the calcified scars, the second would have originated the large abscess which was opened and drained, and the third embolic shower probably set up the multiple small abscesses found post-mortem. It was in all probability this third attack which caused the illness, with rigors, for which she sought advice in November last.

This case well illustrates the fact that the symptoms of appendicitis are in reality the symptoms of localised peritonitis around the appendix, and that an appendicitis, without peritonitis, may give little or no evidence of its presence.

C. L. PANTIN.

The Evolution of Modern Physiology.

The following is a résumé of a paper read to the Guy's Hospital Physiological Society by Mr. P. R. Bolus, on Thursday, February 7th, being the first meeting of the Society.

The earliest records of physiological thought belong to the Greek School. Pythagoras, Hippocrates, Plato, Aristotle, and a mighty host of lesser lights occur to the mind. Philosophers all, physicians some, physiologists but few. They did little to increase our store of knowledge; they have bequeathed us no important experiments. Mind had more attraction for them than matter; yet we owe them much, for the Greek masters were the first to show that a study of physiology is essential to any philosophic system or mode of thought. Among the most interesting of the Greek theories mentioned is that supported by Plato. He divides the soul into three parts; the first portion, which possesses the power of thought, resides in the brain; the second, which originates all motor impulses, has its seat in the heart, while the animal affections, as forming the lowest third, dwell in the bowel.

While the Greek School was stagnating, a zealous band of scientists gathered at Alexandria under the patronage of the second, third, and fourth Ptolemys. By dissecting the bodies of criminals, Erasistratus obtained a fair knowledge of the nervous system. Herophilus made some observations on the pulse, and discovered the lacteals running from the gut.

A wave of darkness then overwhelmed the world of science until the time of Galen, whose span of life extended from 130 to 200 A.D. Galen was the pioneer of experimental research, a man of genius, zeal and eloquence—a power in the land. Galenus, like Plato, divides the functions into three groups, which we may call vital, voluntary, and natural. The vital processes are essential to life, and occur in the heart; the voluntary functions arise from the brain; the liver forms the abode of the natural processes, and these go on without consciousness or control. Galen noticed the pulsation of the brain, and he explains it by saying that the Dura Mater contracts in order to suck up the vital spirit from

the heart by the arteries, through the cribriform plate. The pulsation also serves to drive on the animal spirit, which proceeds downwards to move the muscles and stimulate the soul. Galen correctly describes the effects of hemisection of the cord in young pigs and monkeys; also loss of voice following section of the recurrent laryngeal, and the motor paralysis after section of the nerves to voluntary muscle. The functions of the kidney and bile duct were first explained by Galen.

After Galen, we pass into that sea of darkness known as the mediæval period. Between the second and sixteenth centuries we find nothing but speculation. No research undertaken, no advance in knowledge. Hypotheses of the wildest kind, madness without method, held the field. Van Helmont, who considered an intelligent being situated in the epigastrium to be the essential of life, Paracelsus who maintained the animation of all things, and Descartes with his theories of automata and animal spirits, are among the most reasonable theorisers!

The next writer who claims our attention is Vesalius (d. 1564), the pioneer of human anatomy. He and his merry men climbed the gibbet, dug up graves, and resorted to every method of body snatching. By careful dissection, Vesalius established at last a fairly accurate idea of the structure of the body. With regard to the brain and alimentary canal his knowledge was correct and detailed, and in his list of muscles, but few are omitted. The value of this work is beyond dispute; it is the very foundation of modern physiology.

The seventeenth and the early part of the eighteenth centuries may be regarded as the period of infancy of latter-day physiology. Many and able were the workers during this time, though with a few exceptions, such as Harvey, Boerhaave and Malpighi, they have escaped fame.

In Harvey's "Exercitationes de Generatione" we find the first arguments against spontaneous generation, and the process of fertilisation is detailed. His work on the vascular system is too well known to need more than mention. In 1622, Asselius traced the complete course of the lacteals from the gut, *viâ* the thoracic duct to the blood. Willis, in 1650, was the first to assign different functions to different parts of the brain. About this time Ruysch, a Dutch scientist, injected bodies with coloured wax. Malpighi (b. 1628) founded the study of histology and made many discoveries in this branch.

We have no space here to discuss the work of Rudbeck Hoffmann, Stahl, Berkeley and Boerhaave, important and interesting though it is. The labours of such men as these culminated in the evolution of Haller and Hales. These two eminent physiologists, both as regards point of view and method of investigation, must be classed with the modern school. The following quotation from Hale's "Hæmastatics" (1733), shows that his line of thought and style of deduction are precisely those in vogue to-day:—"In natural philosophy we cannot depend on any mere speculations of the mind. We can only, with the mathematicians, reason with any tolerable certainty from proper *data*, such as arise from the united testimony of many good and credible experiments. Yet . . . . since at the utmost boundary of those things which we clearly know, there is a kind of twilight cast from what we know on the adjoining borders of the *terra incognita*, it seems, therefore, reasonable in some degree to indulge conjecture there, otherwise we should make but very slow advance in future discoveries either by experiments or reasoning."

Reviews.

The price of books submitted for review should in every case be stated.

Elements of Human Physiology. By Ernest H. Starling, M.D. (Lond.), F.R.C.P., F.R.S., Jodrell Professor of Physiology, University College, London. Fourth edition, 8vo. (London: J. & A. Churchill. 1900.) 672 pages. 12s. 6d.

When Dr. Starling's text-book first appeared nine years ago, it at once established itself as a sturdy and original account of physiological science. Succeeding years and editions have added to its reputation, and no student, whether "Conjoint," "Fellowship," or "M.B.," has dipped into its pages without being rewarded by a clearer view of the functions of the animal body.

In appearance and size, however, there is no doubt that the early editions were too modest, and although the discriminating, including all Guy's men, were not deceived by this, we are glad that the new edition is of a size and form more worthy of the contents. The subject-matter has undergone still more important changes, many of the chapters have been replaced by new ones; there are additional illustrations, such histology as is pertinent in a text-book of physiology has been included, and the whole is suitably expanded.

The first two chapters are introductory to general physiology and to the chemistry of the body respectively, and the latter has been entirely re-written with a breadth of view which is characteristic of the whole work. In the section on the proteids, for instance, the comprehensive explanation of the structure of these bodies as ascertained by means of their decomposition products is a welcome addition to the lists of tests which are usually found in manuals under this heading.

The view of the coagulation of the blood given in the last edition, and founded on the work of Wooldridge and Hammarsten, is adhered to, the plasma being regarded as containing within itself all the elements necessary for the formation of the clot.

The chapter on the Vascular Mechanism is amplified, and several new figures are introduced. In view of Professor Starling's published writings it is hardly necessary to say that the accounts of lymph and tissue fluids, the mechanisms of the digestive, respiratory, and other visceral movements, and of the secretion of urine, are authoritative relations of our knowledge on these subjects.

In one or two places we think that the steps of the argument should be more fully stated, as the mind of the reader is not always able to follow the text with ease; for example, at the bottom of the paragraph on page 403.

Much valuable work has been done of late on the physiology of the nervous system, and hence the chapters dealing with the brain and spinal cord have been completely recast. We recommend not only the prospective examinee in physiology, but also the student in the wards to make himself acquainted with these sections; there are no parts of pure physiology which are more directly applicable to clinical work. The plates setting forth the courses of the various nerve fibres in red and black are a great addition. A description of the sympathetic system, admirably elucidated by three such plates, is introduced after the chapter on the brain; the main results of Professor Langley's researches are included and there is a discussion of the "local reflex" phenomena. So far as our knowledge goes, no other text-book contains such an account of this work.

Modern Surgery: General and Operative. By J. C. da Costa, M.D. (W. B. Saunders & Co.) 21s.

This manual—the work of an eminent American surgeon—is not intended to join the category of the large text-books of the present day, nor can it be classed amongst those suitable for students entering upon their surgical work, but rather for those men with some preliminary knowledge of the subject.

Like so many of those publications from American authors, it is peculiarly uneven in the value of the various parts. The opening chapter on bacteriology, the principles of which are of such vast importance to the aseptic surgeon, is crammed into the small space of twenty-five pages, nearly one-third of which is taken up by a dissertation on antiseptics. In consequence, the amount of bacteriology presented is extremely elementary, and the author leaves us with the statement that staphylococci cause localised abscesses, whilst streptococci are responsible for the more acute septic processes. No mention of lysol can be found as a germicide, though it is now so much used in Europe.

The chapters on general diseases are on the whole poor, such a subject as rickets being dismissed with a few lines, but that on diseases and injuries of bones is very distinctly above the average of text-books. The author is very definite in his treatment of each individual variety of fracture, and explains his methods with many diagrams. He gives us numerous kinds of splints and apparatus in vogue with American surgeons, but rather surprises us in condemning the Hodgen for fractures above the centre of the femur. Included in the article on articular disease, da Costa speaks highly of the treatment of chronic synovitis by the hot, dry-air oven and gives some useful remarks on the subject.

The cerebral surgery is good, but the most useful part of the book is that devoted to the technique of operations on the abdominal viscera. Here are described and pictured the various methods of intestinal anastomeses in such a manner as to be easily followed, and very plainly are stated the advantages and disadvantages of the numerous mechanical appliances used, and the considerations as to when each should be employed. Laplace's anastomosis forceps, recently introduced into England, come in for severe criticism. There is one procedure advocated to diagnose a suspected partial rupture of the stomach wall (even where the peritoneal coat alone remains intact), credited to Senn, which, to say the least, sounds to us dangerous, namely, to distend the viscus with gas and then to determine the contour of the dilated organ, or, in complete rupture, the presence of gas in the peritoneal cavity.

The chapter on syphilis is full and complete, attention being drawn to the undesirability of giving mercury in the primary stages on the ground of difficulty in clinching the diagnosis. A test for syphilis by estimation of the amounts of hæmoglobin in the blood before and after a mercurial inunction is given, but its value doubted as absolute.

Many American pharmaceutical preparations are used, and the author is a very strong advocate for ichthyol as an external application.

Though many chapters are poor, there are many useful hints to be picked up in this book. The reading is easy when one has first mastered the American phraseology, and many eminent surgeons' opinions are expressed. The title of the work is fully maintained, the present edition being brought so well up to date that Treves' opinion on bullet-wounds in the South African War are given, whilst numerous skiagraphs are included. It is unfortunate that more space has not been devoted to diseases of the breast and testicle, both of which are dismissed with a very few words. Special subjects, such as rhinology, laryngology and otology are omitted.

Recent Additions to the Dental Museum.

Presented by Mr. A. E. Baker—14 ancient instruments including 2 Foote's automatic mallets (manufactured not later than 1860), 1 Jones' mallet (dated about 1870), 2 or 3 hand drills, excavators, forceps and sealing instruments.

Presented by Mr. J. H. Badcock—4 models showing the effects of syphilis on the permanent teeth.

Presented by Mr. W. A. Maggs—3 specimens of dilacerated teeth. 1 specimen showing double dilaceration. 3 specimens of well-marked exostosis. *False* gemination occurring between the second right upper molar and the wisdom tooth behind it. An enamel nodule is also situated on the root of the second molar.

Presented by Mr. G. S. H. Barnett—Section of a lower jaw showing the persistence of a lower left second temporary molar with complete absence of any sign of a successional tooth.

Presented by Mr. H. J. Webb—A temporary lateral incisor and canine showing true gemination.

J. LEWIN PAYNE, *Curator.*

Passim.

As was only to be expected, our readers availed themselves eagerly of the opportunity afforded to them of securing a standard work like "Wilks' Pathological Anatomy" at such a low figure. In less than two days over 100 copies had been subscribed for. We then received the welcome news from the printers that there were altogether 150 copies, and since then the remaining 50 have been appropriated. They will be bound and ready for distribution next week. In the meantime we must point out that we cannot possibly send them post free for the inclusive price of 2s. 6d., as some subscribers seem to have assumed. The postage and packing will amount to 6d. extra, and we should be glad if those who have already remitted the 2s. 6d. would kindly send the extra 6d.

The "At Home" given by the Council of the Nurses' Recreation Society and by Mrs. Cosmo Bonsor, proved to be a most enjoyable and convivial evening. We understand that the tasteful arrangement of the Court Room was largely due to the artistic skill of Sister Bright. Dr. Perry added much to the enjoyment and comfort of those present by throwing open his own rooms and so affording ample space for the numerous gathering. The Nurses' Choral Society and Students' Glee Club gave an excellent programme, in which they quite maintained their previous standard of efficiency. The refreshments provided downstairs were much appreciated, and an amusing game of "I spy" was constantly taking place between those who met in the same quarter *more than once*. The chief incident of the evening was the presentation to the Matron by the Nurses of the Institution, and everyone was delighted with the gracious and dignified little speech of the Matron.

On Tuesday last, the much delayed Rugby Cup-tie with St. Mary's took place at Richmond. As to the result, nothing was left to be desired, but the method of our team has not left us any too confident with regard to our coming struggle with Bart's. All through the first half, there was only one team in the running, and, but for bad luck, and bad management, at the end of some really good bouts of passing, a substantial total would have been amassed. During the greater part of the second half the team seemed to have given up their endeavour to score, and noting the renewed vigour of our rivals' attack, Guy's supporters spent an exceedingly anxious half-hour. Then again towards the end our representatives got together and soon placed the issue beyond doubt. Was the team unfit? Or was it the knowledge that we led by a goal that created a spell of slackness during the second half. We are inclined to think the latter, and should like to warn our long-suffering team against its repetition. Anyhow, "all's well that ends well."

The forwards worked well and hard, and certainly got more than their share of the ball, but their tackling was, with a few exceptions, lamentable. Our idea of cup-tie football, as handed down from the last decade, is that one player is seldom sufficient to make quite sure of an opponent, but the more the merrier, or we may add the more certain, and that so long as the player is in the upright position he is still in a position to do harm, while for anyone reduced to the necessity of meeting mother earth at more than the two points, the opposing side is for the time being reduced in the same proportion. The moral is obvious. The three-quarter line was distinctly smart, and when at full strength will certainly be more than a match for any of their opponents. Orpen seemed inclined to keep the ball a little long, but otherwise was good. Cutler, Morgan, Wall, and Lawry, were all conspicuous and set a most excellent example. Despite a few shortcomings, we are sure the team did their best, and congratulate them on having successfully overcome the first of their trials, and having brought us one stage nearer the cup.

The Re-endowment Fund of the Hospital has just received an addition of £5,000 from an anonymous donor, who it may, however, be

admitted is one of the Governors. We understand that this is his second donation of a similar amount, which, together with other large sums, he has contributed during the past few years.

Clinicals are always keen after poisoning cases, but they hardly look for them among themselves, nor would any of them venture on voluntary self-sacrifice for the sake of their colleagues; it is too unpleasant and painful a business, and certainly poor French thinks so, who is now warded in John, and suffering from the effects of swallowing some concentrated sulphuric acid, drawn up into his mouth with a pipette. Fortunately he was on the spot for immediate treatment, and is now doing well. He has our sincere sympathy. One of his chief regrets was his inability to take his place in the cup-tie match last Tuesday.

Dr. W. Cathell, of Baltimore, claims to have discovered a simple method of reducing obesity. He prescribes a large glass of Kissingen water three times a day, half-an-hour after meals, and a similar glass of Vichy water three times a day on alternate days. He does not offer any explanation of the underlying physiological principle, if there be any, but seems to be quite sure of the efficacy of the treatment.

Another novelty in treatment which comes from the other side of the Atlantic is the use of thermol in typhoid fever. Thermol is a coal tar product with the formula $C_{14}H_{15}NO_3$. It is supposed to be antipyretic without any toxic effects, and to have a generally beneficial effect upon the course of the disease. Dr. Miller, of Philadelphia, employed the drug in the epidemic there last year, and he champions it in a lengthy paper, in which he compares cases, with full details and charts, in which the drug was given, with those in which hydrotherapy and other methods of treatment were adopted, much to the detriment of the latter.

We notice also that the American surgeon is endeavouring to bring ordinary chronic constipation within the grasp of the surgeon. Dr. Mayo, of Rochester (Min.), suggests that a frequent cause of constipation is too narrow an opening at the ileo-cæcal valve, and with that idea in view he has performed two operations in which he enlarged the orifice, and which have been attended with good results.

Elsewhere will be found the verses of a song which was composed by Mr. Hammond, father of Mrs. Cooper Foster, and was sung on the occasion of the Guy's dinner of 1848. We have to thank Mr. Thomas Bryant for hunting it out and sending it to us.

Everyone will be glad to hear that Arthur Moon has been released by the Boers, after being their captive for twenty weeks at Pietersburg. He is in good health and has been well treated by the enemy.

Our congratulations are due to Dr. C. S. Ticehurst, of Petersfield, an old Guy's man, who was presented with an illuminated address and a purse of sixty guineas, at a meeting of subscribers of the local cottage hospital on his retirement as Honorary Secretary and Medical Officer. In the address they desire to express their appreciation of the services rendered by him to the hospital for the past twenty years.

Among the list recorded in the *Daily Mail* of people still living who had lived under George III. was mentioned a Dr. George Archer, a Guy's man, now living at Feltwell, in Norfolk. On writing to him for reminiscences of his days at Guy's, we have received the following account: Dr. George Archer was born at Barton Mills, near Mildenhall, on January 13th, 1811. As a child, he was taken to see the rejoicings after the battle of Waterloo. He entered Guy's in 1828. Sir Astley Cooper was then Consulting Surgeon and the other members of the Staff were Aston Key, Morgan, Bransby Cooper, Edward Cock, and Hilton. The Physicians were Drs. Bright and Addison. Mr. Archer was present at the operation on Hoo Loo, a Chinaman, who died under the operation and whose portrait is be seen in the Museum. One of the subjects

brought to him for dissection was the body of the celebrated "Italian Boy," the last of Burke's victims, but the subject disappeared in a marvellous manner when the crime was discovered. He left Guy's in 1833, and practised at Feltwell till 1888, when he retired on a much needed pension of £50 a year from the Poor Law Board for long medical service in a district of the Thetford Union. His eyesight has been failing for some time, and he has been quite blind for over a year. His health has been giving way for the last two years, and he has not left his room since November last, but his mind is quite clear and his memory is good, and he takes a keen interest in the topics of the day.

The Inter-hospital Cross Country Cup, which at present reposes peacefully in our own smoking room, will be competed for on Saturday, March 16th, at Blackheath. The course will extend over 10 miles. Four hospitals have entered this year for the competition—Bart's., Thomas's, London, and Guy's. The start will be made at "The Green Man," near Lewisham Station. It is hoped that Guy's men will turn up to support those who have so ably maintained the supremacy of Guy's in this branch of sport, and who will, we trust, by their renewed efforts successfully avoid any necessity of the Cup taking a change of air.

The following letter has been handed to us, and is a wonderful specimen of the English language, as she is conceived in the mind of the foreigner:—

Borculo, February, 1901.

The administration of Guy's Hospital, London.

In consequence of a prize-question, mentioned in the newspapers concerning pathology, I am so free to communicate, that I possess an infallible medecine to cure this fearful disease within twenty-four hours, when it is not too much corroded. I am willing to expedite the medicine, when asked for. Please to send me word.

It is with deep regret that we have to record the untimely death of Henry St. Austen Alder. He had been delicate for some years and was known to be a victim of the tubercle bacillus. He took a 2nd Class Natural Science Tripos at Cambridge, and came to Guy's in 1897. He passed Surgery, at Cambridge, in December, and Conjoint Surgery and Midwifery in January last, so that he was on the verge of being qualified. In 1899 he was compelled to give up his work for six months on account of phthisis. At the beginning of February he complained of headache, and on the 11th he was taken into Clinical, and he died on the 17th of tuberculous meningitis. We offer our sincere sympathy to his relatives and friends.

It is proposed to hold the annual "Ladies' Night" of the Debating Society on Saturday, March 16th, when it is hoped Dr. Pavy will be able to take the chair as on previous occasions. The meeting will be held in the Court Room, Messrs. H. Wacher and F. W. Gibson will open the debate, and will discuss the feminine influence on man's character.

We are asked to announce that the date of the examinations in elementary anatomy, anatomy and physiology for the junior proficiency prizes, Sands Cox Scholarship, and the Michael Harris prize, has been altered to Monday, March 18th, at the corresponding hours to those advertised for Wednesday, March 20th.

A medical missionary is in great request at the hospital at Chemulpho, in Corea. The Bishop of Corea offers a £100 a year for four years, and a free passage out and home again. He wants a man at the end of September to commence work on October 1st. Application should be made to Dr. J. Cowell, F.R.C.P., 24, Harrington Gardens, S.W.

On Monday next will take place the Annual Dinner of Guy's Hospital Officers and Servants at Bridge House Hotel. Mr. Cosmo Bonsor will take the chair, and several Guy's men have promised their services to help entertain.

Royal College of Surgeons.

Three Lectures on "The Topographical Anatomy of the Abdominal Viscera in Man" will be delivered in the Theatre of the College, on Monday, Wednesday and Friday, March 4th, 6th and 8th, at 5 o'clock each day, by Professor Christopher Addison, M.D., F.R.C.S.

"At Home."

On Tuesday, February 19th, the Council of the Guy's Hospital Nurses' Recreation Society gave their "At Home," for which an excellent programme was provided by the Nurses' Choral Society and Students' Glee Club. Mr. Cosmo Bonsor and many members of the Staff were present, while Mrs. Cosmo Bonsor made a most charming hostess. The Court Room was very tastefully arranged and decorated with flowers and plants, and when filled with visitors presented a very pretty spectacle. The nurses of the Institution had been specially invited to meet the Matron, their former Lady Superintendent. Owing to the continual inpouring of visitors, it was impossible to open the programme till some time after the appointed hour of 8 p.m. It commenced with a cantata by Schumann, "Song for the New Year," in which Mr. Goss figured as soloist. We are probably right in saying that this is the most difficult work hitherto attempted by the Choral Society and Glee Club, and though the effort was perhaps more laudable on account of the ambition which prompted it than the success which attended it, it was on the whole a creditable performance, and showed that some solid work had been done in the practices. An interval then followed in which a presentation was made to the Matron by the nurses of the Guy's Hospital Trained Nurses' Institution.

The presentation, consisting of a handsome silver tray, bon-bon dishes, and tea-caddy, together with an illuminated address in album form, was made by the Treasurer, Mr. Cosmo Bonsor, who acted as spokesman for the Nurses, and made one of his most genial and befitting little speeches. He said that he must first explain why he was present at that assembly and why the duty of spokesman had devolved upon him, seeing he had never been through the excellent course of training at Guy's, and had not enjoyed the education of a trained nurse. He had in the first place made several endeavours to discover who was the most senior nurse, but he had no sooner got hold of one name than he was told of another. He then appealed to several of his friends to undertake the duty of presentation, but they all refused with one consent, and so the duty devolved upon him. He could not speak too highly of the way in which Miss Swift had carried out the duties of Lady Superintendent of the Institution, and now that she occupied the post of Matron of Guy's Hospital—the most honourable position for any lady in her profession—he wished her many years of happiness in her new work. In making the presentation he wished to express on behalf of the Nurses their feelings of gratitude for her kindness and friendship, and their appreciation of her work amongst them.

In reply, the Matron, Miss Swift, thanked the private nurses very much for their good wishes, and for their beautiful gift. She was very sorry that they were not all able to be present that evening in answer to Mrs. Bonsor's kind invitation. She would like to assure each one that it was a great help to her in undertaking new duties to feel that she had their co-operation and their support, and that her work in the future would not separate her from the institution in St. Thomas's Street. Their work had often been done under great difficulties, and she could only say that they had been most loyal and conscientious, and she was most grateful for all the help they had given her in the past. She thanked them all very much for their present this evening.

The programme was then proceeded with. "Song of the Vikings" was sung in excellent style by the full choir. Then followed a song, "The old, old way," by Miss I. Wood, with a violin obligato by Miss B. Alcock, which was heartily encored, we think, as much for the obligato as the song. Perhaps the Choir showed their powers to the best in "Awake, Æolian Lyre," and "There is Music." These were sung with much taste, and very pretty piano effects were produced. Mr. Harold D. Wyatt sang "An Evening Song," and Miss A. M. Beard's voice was heard to much advantage in "Spring is here," and Mr. Claxton blew forth in manly style from the depths of his chest, "Blow, Thou Winter Wind."

Two more part songs "Sweet and low," and "The Cruiskeen Lawn," which were well sung by the full choir, completed the programme, which concluded with "God save the King."

The Choral Society and Glee Club are to be thoroughly congratulated on their performance, which was certainly equal, if not superior, to their previous efforts, and all praise and thanks must be given to Mr. Taylor for his painstaking trouble and his keen interest in their success.

The evening was altogether most successful and everyone appeared to thoroughly enjoy themselves.

Jacksonian Epilepsy.

A paper read before the Physical Society on Saturday, February 9th, by Mr. N. Blake Odgers.

(*Concluded.*)

(5). Or cysts due to the cysticercus or echinococcus may again cause typical Jacksonian attacks. Bergmann records five cases where one or the other of these parasites was found.

(6). Cerebral tumours may be roughly divided into two classes, one in which there are well-marked symptoms of a general kind, viz., headache, vomiting and optic neuritis, with little to localise accurately their situation: the second, in which the general symptoms are few, but of which, on the other hand, the locality can be accurately defined. It is of this last group that Jacksonian epilepsy is so important a symptom, involving as they do the brain cortex.

The commonest forms of tumour found in such cases are, of course, sarcomata and gliomata. Of the former, Dr. Byrom Bramwell gave a good example in the *Clinical Journal* of October last year. He was a man, æt. 35, who had suffered from Jacksonian epilepsy for some months,

the attacks commencing in the toes of the left foot. There was no headache, no optic neuritis, and no vomiting. In the corresponding leg area, at the subsequent operation, a large tumour as big as a man's fist was found; this proved to be a sarcoma and the man got perfectly well.

In 1896 there was a woman under Dr. Hale White who had Jacksonian fits, starting in the right thumb and involving the whole of the right side of the body. Mr. Lane removed from the left ascending parietal convolution a soft cystic growth, this being, I think, the first cerebral tumour removed in this hospital with a perfectly successful issue. Less common tumours met with in these cases are tubercular masses, and fibromata, while in one case an angioma was found; in another a lipoma of the pia mater.

In 1893 Mr. Lane operated on a woman, who two years previously had had her breasts amputated for cancer. For some weeks before her admission she had had attacks of Jacksonian epilepsy, commencing in the right wrist and involving the right arm and the right side of the face. In the middle of the left Rolandic area a hard nodule of growth was found three-quarters of an inch below the surface. The woman died subsequently of lobar pneumonia and the cancerous growth was found to be chiefly in the white matter, becoming subcortical in the ascending frontal convolution.

In all the cases of irritating bodies within the cranium that we have so far considered, the appropriate motor area has been directly involved. In certain cases, however, of typical Jacksonian epilepsy, the irritant is situated elsewhere. In one, there was a gumma in the frontal lobe; in another, a sarcoma in the same situation; in a third, a sarcoma in the left occipital lobe gave rise to attacks commencing with no visual aura, but with tingling in the right hand, spreading thence to the face. In a fourth case a tumour in the white substance of the left hemisphere caused fits which commenced in the left wrist, and were wholly confined to the same side as that of the tumour. Whether such cases are to be explained by the existence of association fibres, or by changes set up in the intracranial tension, or in the circulation of the motor cortex, does not appear to be understood.

Jacksonian epilepsy is frequently associated with a hemiplegia, which may precede or follow the appearance of the convulsions. If the hemiplegia is antecedent, it should point theoretically to a subcortical lesion involving the cortex secondarily. A subcortical tumour should first produce, if it be of sufficient size, a paresis, and possibly a tonic spasm, and then, as it involves the cortex, irritation of which alone can give rise to the clonic convulsions, the typical Jacksonian fits. Conversely in cortical lesions, the convulsions should precede the hemiplegia. Practically, however, the distinction does not appear. Dr. Jackson mentions the case of an external tumour involving the cortex which caused a paresis eighteen years before any fits appeared, while children, who are recovering from a hemiplegia, may have Jacksonian attacks on the affected side.

All the cases of focal epilepsy that I have considered up to this point have been truly Jacksonian: I mean, they have been caused by some gross irritant. There remains the second group in which no such lesion appears to the naked eye. Many of these cases may probably be the result of falls on the head in childhood, leading to a local degeneration of the cortex. Such a case was published by Professor Gotch and Mr. Rushton Parker in 1893.

A boy, aged nine, fell down on the right side of his head in 1891; three weeks later he started fits, which commenced constantly in the left thumb. Nothing abnormal was found, and the thumb and wrist centres were localised electrically and excised.

Microscopical examination of the excised portion of the brain in such a case as this showed in one instance a thickening of the pia mater with hyaline degeneration of the capillaries; the brain was infiltrated with spheroidal cells and by an overgrowth of the neuroglia, while the pyramidal cells showed some degeneration, some having a shrunken appearance with little cytoplasm. In another, the large pyramidal cells were very scarce but stained deeply, the nuclei being indistinct; in a third, they appeared to be undergoing a fatty change, while in a fourth, the perivascular and pericellular lymph spaces were dilated.

To give an idea of the relative frequency of the conditions I have described, I might quote a table compiled by Rolland. Of 112 cases of Jacksonian epilepsy, 48 were caused by tumours, 21 by softening, 8 were due to traumatism, 9 to superficial or deep aneurism, 7 to cortical hæmorrhage and 5 to cerebral atrophy.

Some partial epilepsies are due apparently to chemical irritants, such as the poisons associated with uræmia, lead, or alcohol, especially if the latter contains absinthe or furfurol.

Sir William Broadbent, in 1883, recorded a case in which the uræmic convulsions were entirely unilateral. A more interesting case is the following:—

A woman, æt. 38, was admitted into the Western Infirmary, Glasgow, who had had Jacksonian epilepsy for twelve months, but was very much benefited by bromides and for over a year the fits stopped. Eighteen months later she came back with acute nephritis, the typical focal convulsions then recurring. Nothing was found in the brain to account for them; it appears as if the uræmic poison picked out a centre previously in a morbid condition. In the case of another uræmic woman, who had fits beginning on the left side of the face, and limited to the left side of the body, nothing was found but a general œdema of the brain.

Whether the following case should come into this category, I do not know.

A man aged 20, under Dr. Goodhart in 1899, suffered from phthisis and lardaceous disease. He had been subject for ten months to fits, which started in the fingers of the right hand and ran up the arm. He had altogether fifteen fits in the eight months he was in the

hospital, and they were thought to be due to tubercles on the cortex. At the autopsy nothing was found to account for them.

Jacksonian epilepsy may be simulated by the convulsions of hemichorea, hysteria, or general paralysis of the insane. Dr. James Russell collected a number of cases of chorea, in twenty-nine of which the convulsions were entirely confined to one side, and in five of them a very definite march was observed. In no one of these cases was there an autopsy, but such cases as these would seem to support the theory that regards all chorea as due to cerebral embolism. Many general paralytics have such partial epileptic attacks. In a number collected by Dr. Newcombe, 60 per cent. suffered from typical Jacksonian convulsions.

As regards the association between Jacksonian and ordinary idiopathic epilepsy, many epileptics have localised motor discharges before they are observed in fully developed fits. But, if a man who has suffered from idiopathic epilepsy, commences to have fits of the Jacksonian type, probably there is some gross irritant.

In an epileptic idiot's brain, who had had epilepsy all his life and latterly Jacksonian attacks, twelve gliosarcomata were found equally distributed throughout either hemisphere.

I do not think I shall be beside my subject in now introducing some examples of so-called sensory epilepsy —a form strictly comparable, I think, to the Jacksonian type, in which, however, the sensory phenomena or auræ are magnified, while the convulsion is reduced to its minimum. In such cases it is common to find some gross irritation of the centres for the special senses.

A man aged 26 had fits which consisted of his falling into a dreamy state, with a constant reminiscence of a certain sentence. This was followed by a smacking sound made by the tongue and by movements of the lower jaw. Dr. Jackson here diagnosed an irritative lesion of the uncinate gyrus, and an autopsy showed a small defined patch of softening in this situation.

In a woman with a tumour as large as an orange in one temporal lobe, the chief feature of the fit was a nauseating smell, which she experienced constantly.

Dr. Byrom Bramwell mentions the case of a patient, who came to him for attacks of flashes of light in the right eye, followed by temporary right-sided hemianopsia. A post-mortem showed at the top of the left occipital lobe an old syphilitic scar. In the case of a woman who had hemianopia, the fit consisted in the vision of the same smiling face of a child in the hemianopic field.

In this group of sensory focal epilepsies, surely migraine may fairly find a place. Dr. Liveing regards it as the sensory equivalent of a true epileptic attack, but do not the remarkable prodromata, the headache, usually unilateral, beginning in a localised spot, and gradually spreading, together with the unilateral facial spasm which may accompany this condition, suggest the counterpart of a focal, rather than a general epilepsy?

Comparable, too, to the neuroma which causes Jacksonian attacks, are the cases of epileptiform neuralgia of the trigeminal nerve. In such a case there were attacks of severe neuralgia accompanied by a twitching of the left side of the face, which spread down the left arm. This was cured by excision of the left Gasserian ganglion.

In most of the cases that have been considered, the irritant has involved a great many motor centres, and yet only one has been discharging. There would seem to be a difference in the susceptibility of the centres. For instance, in the case of Dr. Byrom Bramwell's, the discharging centre was that for the toes of the left foot; the irritant was a sarcoma growing from the dura as big as a man's fist. Similarly in those cases of thrombosis of the cerebral veins, general œdema, or on general increase in the intracranial pressure, some one centre was led to discharge. That there is this difference is proved by electrical stimulation of the ourang's brain. Beevor and Horsley found the hallux centre particularly excitable; so many Jacksonian attacks commence, too, either in the big toe or the thumb.

Originally any gross irritant acts probably by stimulating the terminations of the afferent nerve fibres in the cortex—in precisely the same way, in fact, as an artificial electrical stimulus—but it tends gradually to cause changes in the grey matter. Various hypotheses have been suggested as to the way in which it produces these changes. Some say that it is by changes in the intracranial tension, others by a local anæmia, others by a local œdema. Dr. Hughlings Jackson suggested a chemical hypothesis, that the phosphorus ingredient in the nerve cell was replaced by nitrogen; it is more nitrogenous, and hence more explosive.

Whatever the explanation, it is certain that the fits soon come to depend not so much on the foreign body as on some persistent yet varying change in some small part of the cortex; on this change the fits directly depend, independently of the gross irritant which produced it.

Lastly, to attempt to show how far operative treatment has been successful in dealing with cases of focal epilepsy, some statistics of different operations are as follows:— Of 46 cases in which the operative measures were confined to the cranial bones and dura, 4 died, 22 were cured and had no recurrence of the fits eighteen months later, while there were 20 failures.

Bergmann records 40 cases in which tumours—sarcomata, gliomata and cysts—which gave rise to typical convulsive seizures, were removed. Of these 8 died after the operation, 13 were cured, 5 had a recurrence of the growth, and 12 were considerably better.

In the last group there are 19 cases in which there was no gross lesion, but the discharging centres were discovered by means of the Faradic current and excised: of these 9 were cured.

In each group we get roughly 50 per cent. of cures; a rather lower percentage than that given by some writers, whose figures are 65, 59, 58 per cent., respectively.

There are two facts which seem to be responsible for the number of failures:—(1) In the first place, some

cases of traumatic epilepsy—cases in which there may be an obvious depression and an obvious scar which reddens during the attacks, but in which the fits are general and not typically focal—are operated upon and these are very seldom successful. A soldier was wounded in 1870, in the Franco-German War, a bullet splintering the left parietal bone. Many splinters were removed; two years later he commenced to have epileptic fits. In 1884 he was trephined, but no thickening of bone or dura was discovered. He died some years later in statu epileptico.

(2) Many cases are operated on too long after the commencement of the fits, when it is no longer a matter of a local irritation of some one cortical centre, but when the whole excitability of the brain has been deranged.

The cause of most of the recurrences of operations on the cortex is the scar, which it seems impossible almost to avoid, and which acts in its turn as a local irritant. So far is this the case, that an American surgeon expresses the view that the removal of a discharging lesion is at most palliative; the scar is inevitable, and will give rise to new irritation. The records of some cases seem little better than that of Dr. Prichard's, in 1822. "The man," he says, "went out of the Bristol Infirmary in the same state with respect to his disease, but very much reduced by the attempts made to cure him."

In conclusion, I must mention Dr. Hughlings Jackson's kindness in sending me a copy of a paper he read before the International Medical Congress in 1881, which contains by far the best account of these convulsions in print.

In Quest of Gold.

(From our Special Correspondent in West Africa.)

Cape Coast Castle,
January 16th, 1901.

A reference to any newspaper, an enquiry of any "City" man will elicit the undoubted fact that West Africa at the present moment is booming. Whether it is that the war in South Africa has killed, for the time being, financial interest in the Rand mines, or whether it is merely that we are at present on the crest of popularity in the cycle of Gold Coast affairs, the fact remains that West Africans are booming, and booming with fully inflated lungs. *Propter hoc*, your correspondent has found himself swept into the rush to the West Coast, and has found himself, with nine white men and an indefinite number of blacks, at Cape Coast Castle, *en route* for the Bush. We are adventurers, explorers, call us what you will, and we are bound for gold, pure twenty-four carat gold, which shal gladden the hearts of our Directors and increase the financial value of our Company. So we are benefactors, willy nilly, of the great British public, and benefactors, through the might of the Peace which follows British enterprise, of the whole civilized and uncivilized world. Yet if you in peaceful London, with your usual placid lives and occasional outbreaks of lurid Hooliganism were but to see us, in our heavy boots and gaiters, with our immense sun helmets and our Webley's, each chamber ripe with sudden death, you would hesitate in your diagnosis of our state, and your prognosis would be held absolutely in abeyance.

The steamship service from England to the West Coast remains as a sign of what has been, and has not yet expanded to the requirements of what is, and what is to be. Ten knots at the best; half-speed in any sea, and much cargo for intermediate ports. A cuisine which leaves much to be desired, and accommodation which suggests that passengers were an afterthought in the economy of the shipping company, make the preliminary experiences both tedious and unpleasant, and the arrival at Cape Coast a matter of much longing. We started in a gale and we bucketed in the Irish Sea for many weary hours, while the chief engineer watched his engines with the throttle valve half closed, and cursed his assistants when the propeller left the sea and rose high in the air to thrash the winds in aimless impotence. I lay below and gasped, and awaited death with a positive longing, but the ship banged and rattled through the seas with cheerful heedlessness of storms and winds, and four days later I staggered up on deck to find the seas calmer and the telegraph hauled over to "full speed." And so we went at full speed of ten knots, while Cape lines came up out of the north and chased us down to disappear over the edge of the southern sea. Two days lost before arrival at Teneriffe, and an extra day spent in a vain attempt to make the Spanish labourer do half-a-day's work in less than four days, made the expected date of landing retreat three days further into the new year. Land we did at last, on the 9th of January, after a preliminary taste of West Africa at Sierra Leone. It was at this town that we learnt of an expedition to the Gambia, where revolt was ripe and the British Raj in danger of extermination. And then on to Cape Coast Castle, the heart of the Gold Coast, the happy home of the educated Fantee and the malarial mosquito. In my insular ignorance I had pictured a town built perhaps on piles, at any rate on a low lying marshy shore with fœtid pools, a hot sun overhead, and an indescribable stench. The sun was hot, very hot, and the odour of the town in places distinctly unpleasant, but landing in the dry season, my first impressions were decidedly more favourable than I had anticipated. The country is hilly, and the town is built on a number of these small, steep hills, while the marshy pools are conspicuous by their absence. There is a lagoon lying outside the town on the road to Elmira, and the water looks very cool and refreshing to the dry jaded eye. Its appearance after sunset I can only imagine, for the wholesome fear of mosquitos engendered in me at the hospital, has killed any desire to visit their breeding places after dark. Cape Coast is a singular collection of European and native houses, arranged higgledy-piggledy along narrow native streets. Sanitation is that of our early forefathers, before the coming of the Romans, and the water supply depends solely on the exertions of native water-carriers, who bring

water in basins from the native wells or "soaks." This, when boiled and filtered, may be used with impunity, which recommendation is the best that can be given it. Most of the water used here comes from Germany, aërated natural soda water of very low alkalinity, and retails at a shilling a reputed quart bottle. The native huts or houses are, with the exception of the educated and wealthy black men who affect English customs, built of mud, and are cubicle in shape with mud-walls two feet thick, and flat mud plastered palm and bamboo roofs, in every case arranged with a parapet at least two feet in height. These houses are, as can be imagined, the most abominal places men could possibly conceive, and find their fitting antithesis in the European bungalows, with wide verandahs and jalousied windows, which make life generally passable. The population itself is Fantee, with a small admixture of Hausa and Arabs, the latter being identical with the Arabs in Egypt, and, indeed, frequently trekking across the Sahara from the one British province to the other. The Fantee, dressed à la Fantee, is not unpicturesque, for he wears in addition to the loin cloth, a robe of highly coloured material, after the fashion of the Roman toga. His head, even in the blazing noonday sun, is absolutely bare, and the close cropped curly wool with which he is fitted seems a perfect substitute for the European Solah Topee.

But that is the native unadorned. If possible, he apes the European. Should he be educated—and the Roman Catholics, Wesleyans, and Church of England missionaries account for a lot of native education—he wears flannel, or duck suits, sports a large felt hat, or even a sun helmet, fans himself with a white handkerchief, and buys brown polish for his boots! If he is the ordinary personal servant or "boy," he will at least wear a pair of shorts and a vest, and other clothing according to his master's caprice. One "boy," rejoicing in the expressive name "Tum-tum," appeared on the eve of a journey up the bush in khâki riding-breeches, white vest and brown coat. His legs and feet were, of course, bare, but his head was adorned with three hats, increasing in size from within outwards. He also carried, slung from his person, two quart waterbottles, a camera, and a revolver in holster, all the property of his master. It was most ludicrous to see this chap strutting about in front of the "hotel" waiting for his master to start. A crowd of admiring friends surrounded him, and waited respectfully for any favour that he might deign to bestow; but the immense importance at which he estimated himself prevented all recognitions, and he departed for a six months' sojourn in the bush without condescending to notice either friend or relation.

The food, which in all expeditions plays by no means an unimportant rôle in the comfort of the individual members, cannot be highly praised. We are, at present, living at Acquah's, the only hotel in Cape Coast, and we feed there on native produce, supplemented by tinned meats and a very occasional joint from a steamer. It is rumoured, and the rumour is made credible by the occasional vision of a phantom fowl, that chicken can be obtained here. So far we have not yet tasted this dish, but have been surfeited with tough, tasteless mutton, and abominable—in a chiefly negative sense—goat flesh. Pineapples and oranges are as common as flies and are valued at little more. They are distinctly good in flavour but are not of the finest quality. The oranges, in particular, are very big, juicy and sweet, but with little flavour beyond. Palm oil is largely used in the culinary department, and the resulting dish, though very oily and of a dark red hue, is not altogether unpalatable when once the novelty of eating train oil has worn off. So far, we have been free from fever, and the whole party in good health. The former condition can most probably be attributed to the fact that five grains of quinine are taken every morning after breakfast by each and every member of the party, with the exception of the chief, who is not with us at present, and that strict moderation is observed in the daily routine. I have already seen several cases of remittent fever among the visitors at this hotel, and in every case there is either an unbelief in the efficacy of quinine or else a condition of slackness, or dislike for the drug that has led the patient to drop his quotidian dose. From personal observations, on insufficient material I allow, the impression has forced itself upon me that the continued use of quinine is the very best prophylactic in this country, where the greatest care will not always prevent the access of mosquitos. I have instances of an army officer who has spent eight months here and at Kumasi, has employed quinine consistently, in five grain doses, and has been entirely free from malaria; of another officer with five years' service, continuous quinine and no fever; and of a dresser on the Ashanti Field Force, who took quinine for three months and remained free from fever, but yielding to the persuasions of his ill-advised comrades, dropped the use of this drug, with the expected result. If it were possible one would like to estimate the proportion of deaths (i.) in which the fatal issue was solely the result of malaria, and (ii.) in which death was accelerated by excessive alcoholism. There would be much food for the teetotaller if such were done. When you see a man, with the complexion of a prize pig, take three stiff whiskies and sodas before breakfast—and we have this meal at 7 a.m.—the actuality of a malarial cirrhosis begins to become vague, and one wonders whether this condition is not the familiar old friend that we see so often at Guy's.

There is a capital hospital here, built on the top of a good steep hill, and overlooking the sea. The wards are well-built verandahed rooms, and everything is delightfully cool and breezy—an ideal spot in which a sick man can recover health while waiting for the steamer, and a perfect haven of rest to the invalided Tommy after Kumasi and the eight days of bush road. I hope shortly to start up country, and then perhaps I shall be able to send you details of some interest. Up to the present, besides malaria, I have seen two cases of elephantiasis, one of old Pott's disease, and a number of natives with patches of leucodermia, chiefly on their necks and faces,

giving them a most odd appearance. Possibly something may crop up of interest; for the present the mail, which left England on the 26th, has brought no communication for me—no Gazette, Mr. Editor, so I have lost interest in life. Therefore, with the remark that the lighthouse here is built on an auriferous outcrop, with gold-bearing quartz lying idle in the road, I will say good-bye until my next from the bush.

Impromptu Song.

GUY'S DINNER, 1848.

1.

As a visitor, I thank you for the honour just conferr'd Sir,
I really feel excited, and with gratitude am stirr'd Sir,
The pleasures of the evening for a moment I'll retrace Sir,
And endeavour just to give a *diagnosis of the case* Sir,
Bow, wow, wow,
Indulgence to my blunders you must all allow.

2.

When first I enter'd this gay hall, the thought popped in my head, Sir,
That the operating tables invitingly were spread Sir,
But when the viands once appeared, it required but little gumption
To see that we were one and all *disposed to a consumption.*
Bow, wow, wow.
But your lungs are all uninjured, as your cheers well shew.

3.

And then began what some would deem a very curious sight, Sir,
For every one was bent on being exceedingly polite, Sir,
They bowed and raised their glasses—the liquor may be guess'd, Sir,
I'm sure that symptom second was not *water on the chest*, Sir, Bow, wow, wow.
Hydropathy we're all inclin'd to scout just now.

4.

Now tongues began to wag apace, and cheek and nose got painted,
Bacchus and Esculapius began to get acquainted;
The bottle and the joke were passed with wondrous animation,
And instead of merely *venous*, we'd a *vinous circulation*,
Bow, wow, wow,
Perhaps our blood would be a little *buff'd* just now.

5.

And then our able Chairman he challenged my attention,
His tact and his suavity demand especial mention,
No one who heard his kindly tone, could doubt what *Dr. Bright* meant,
He prescribes well for his patients under jocular excitement,
Bow, wow, wow.
May he never be less happy than he seems just now.

6.

The speeches too have well portray'd the object of this meeting,
And to each celebrated guest you give a proper greeting;
Mere rank or title I disdain to flatter or to toady,
But I really think you're honour'd by the names of *Clarke* and *Brodie.*
Bow, wow, wow,
Fair compliments to merit we must all allow.

7.

Midst this galaxy of talent I'd fain enrich each name, Sir,
There's *Travers* and there's *Cooper* who are both well known to fame, Sir;
When *Aston Key* turns up his cuffs you feel a strong reliance,
For you see that he's a Key who has unlock'd the stores of science,
Bow, wow, wow,
Pure surgery with laurels has adorned each brow.

8.

The French Metropolis they say is in a dreadful rout, Sir,
I'm pleased to see that here at least a *Paris* still holds out, Sir;
You've *Babington* who of a fame has been a great creator,
And then you boast an *Addison*— and I'm a pleased *Spectator*,
Bow, wow, wow.
They are too well known to need my poor eulogium now.

9.

To one more name I'm bound to beg attention you will lend, Sir,
I owe one more *conception* to a kind obstetric friend, Sir,
I'm sure you all anticipate I now mean *Dr. Lever*,
He's committed to posterity with *puerperal fever*,
Bow, wow, wow,
He'll excuse me for *delivering myself* I know.

10.

French politics and news just now each man to man rehearses,
And poor old Louis e'en must give a *fillip* to my verses,
I really think the Bourbons all want acumen or quickness,
Or they wouldn't so universally evince the *falling sickness*,
Bow, wow, wow,
A drastic revolution purges France just now.

11.

In times gone by when every man agreed Reform to urge, Sir,
'Twas granted by Lord Johnny and 'twas nicknamed "Russell's purge," Sir,
To bleeding by the Income Tax, he clings with firm cohesion,
But five per cent. was trying on a *dangerous depletion*,
Bow, wow, wow,
The political *Sangrado* has succumbed I trow.

12.

Now medicine like other things gives birth to sundry saws, Sir,
From which it is intended that a moral you should draw, Sir.

There's one that I consider to be nothing else but stuff, Sir,
"Throw physic to the dogs"—I'm sure they've got quite
bark enough, Sir,
Bow, wow, wow,
The dogs all seem to answer me in chorus now.

13.

And now it just occurs to me you're tired of my rhyme
Sir,
And to wind up this doggerel it really is high time, Sir,
You've secur'd me an attention that's exceedingly polite
Sir,
And I really feel indebted—I do though—*Honour Bright*,
Sir,
Bow, wow, wow
And with this adjuration I will make my bow.

MUNDEN HAMMOND.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

South African Memorial Fund.

DEAR SIR,—I have much pleasure in enclosing 10s. 6d. towards the South African Memorial Fund, and I hope that a large sum will be realised to erect a fitting memorial to remind future Guy's men of the service that these men performed for their country.—Yours sincerely,

FRANK J. PEARCE.

University of Pennsylvania,
Philadelphia, U.S.A.

Sport.

Rugby Football.

INTER-HOSPITAL CUP-TIE MATCH.

GUY'S v. ST. MARY'S.

After numerous postponements for various reasons, conclusions were at last tried with the Cup holders in the first round of the Inter-Hospital Rugby ties, on Tuesday, 26th inst.

The ground was in fine condition, but the weather left much to be desired, and a high wind was blowing obliquely down the big ground at Richmond, and the promise of rain, which it suggested, was fulfilled before the game was finished.

Guy's won the toss, and Mary's kicked off against the wind, and O'Brien returned well into touch. Our opponents' pack early showed to advantage as they secured the ball smartly from the scrums, and soon worked back to midfield. A short kick by one of St. Mary's centres put the ball into Harrison's hands; he was well tackled, but not before he had found touch with a capital screw kick. Guy's forwards kept up the pressure, and O'Brien attempted a shot at goal which went wide; Mary's found touch three times in succession from the drop out, so Cutler elected to take a scrimmage on the 25 yards line, but the Paddington pack screwed well, and worked back to half-way. Morgan soon after got well away, but was tackled by Bradfield, when a score seemed certain, and then from a mark Harrison made a good attempt at goal, sending the ball just outside the posts. Following the drop out our forwards came back with a good dribbling rush, in which Wall, Lawry, and Thomas, were conspicuous, but the Mary's men responded well, and had Crozier passed sooner they might have scored. Orpen relieved with a good punt, and then from a scrum near the far touch line Louisson passed out to Morgan, who cleverly doubled round the scrum, and when right on the touch line transferred to Orpen, who scored to the left of the posts and Morgan easily converted.

The Mary's forwards, playing with lots of dash, got into our territory, and Wall was penalised in front of our goal; the free kick, however, went a few feet wide of the posts. Some good forward work took the attack into the Paddington quarters, and we missed some golden opportunities, Thomas having a splendid chance if he had put more energy into his efforts, while Wadson also missed a certain try by failing to gather a rather difficult pass from Orpen. Half-time found us with a lead of only 5 points.

Thomas kicked off after the interval, and St. Mary's taking advantage of the wind, played up with great vigour, which contrasted strongly with a fit of lethargy which seemed to have overcome our forwards, and caused us onlookers no little uneasiness. For about ten minutes we were on the defensive, and then Cutler smartly tackled Bradfield, and relieved the pressure. St. Mary's renewed the attack, but Glendinning, Anderson, and Lawry dribbled back to midfield, and Orpen got a useful run to the opposing twenty-five. Louisson next made a nice opening, and, passing smartly to Morgan, enabled the latter to score an easy try, which he had no difficulty in converting. Mary's made great efforts to score, and by withdrawing a man from the scrum to act on a roving commission, seriously hampered our halves, while our forwards, though working against a diminished pack, did not show to advantage, and especially lacked vigour in tackling. Thompson got well away, and passed to Morgan, who had, however, over-run him, and was judged offside. Cutler was again conspicuous by his clean tackling, as he passed Bradfield beautifully, and Louisson soon afterwards got the leather out to Morgan, who, with a pretty swerving run, scored close to the corner. O'Brien tried a difficult kick, but failed to bring it off, and time was soon afterwards called, with Guy's again attacking, and winners by 2 goals and 1 try, 15 points to nil. Teams:—

GUY'S.—E. M. Harrison (back); S. P. Wadson, M. O'Brien, L. J. J. Orpen and E. Morgan (three-quarter backs); M. C. Wetherell and M. G. Louisson (half-backs); H. A. Cutler, A. H. E. Wall, R. C. Lawry, T. P.

Thomas, R. G. Anderson, A. R. Thompson, E. H. B. Milsom and B. Glendinning (forwards).

ST. MARY'S.—E. W. C. Bradfield (back); J. B. Stephens, R. Crozier, J. Hebb and D. Le Bas (three-quarter backs); E. Milner-Moore and O. Ivers (half-backs); H. Wilson, A. Hodder, J. Haig Burgess, S. Nix, G. Hawker, G. Wells, H. Beckett and V. Nesfield (forwards).

REFEREE.—Mr. P. Coles.

REMARKS.—The game was, as a whole, decidedly disappointing, as after their good display at Croydon, much was hoped from our side. St. Mary's, however, used spoiling tactics with considerable success, and, though seldom really dangerous, defended well.

At full back Harrison kicked excellently, but had little tackling to do, he is still inclined to stand rather far back when playing with the wind.

Of the three-quarters, Morgan and Orpen were the pick, the former playing a very pretty game and all the scoring was directly due to his efforts. Orpen made some nice openings, but seemed inclined to stick to the ball a trifle too long. O'Brien played a good game, and Wadson, though a trifle strange to the game, and to cup ties in particular, made no serious mistakes. Louisson passed out well from the scrum, and Wetherell, though somewhat spastic in his movements, played with good judgment.

The forwards cannot feel pleased with their display, as, though playing against a lighter pack, and in the second spell against only seven men, they had little or no advantage in the scrums. The packing was bad, and the ball, when secured, seldom came out well. They did not screw as well as their opponents, and their rushes lacked combination. With the exception of Cutler, they put no sting into their tackling, and we have seldom seen such a poor display in this respect. There must certainly have been one or more passengers in the scrimmage, and if they mean to use the excellent three-quarter line we have this year, they must put more vigour into their work. Cutler played a good game throughout, and after him Lawry, Wall and Anderson were most conspicuous, though the last-named was, at times, inclined to be clumsy. All seemed in very fair condition; in fact, one or two might with advantage have used a little more of their superfluous energy nstead of keeping it in hand.

GUY'S 2ND XV. v. R.I.E.C.

(R.I.E.C., 23 POINTS; GUY'S 10 POINTS).

Played at Cooper's Hill on Saturday, February 23rd. Playing with the wind in their favour during the first half, our opponents quickly assumed the aggressive, and until the interval, Guy's were kept entirely on the defensive. During this portion of the game, the Engineers scored three times; each try was the result of excellent combined movements between the three-quarters. Two of the tries were converted.

After half-time, the game became much more even, and Guy's scored twice, both tries resulting from single-handed efforts by Burney; Gardiner converted both tries. During this half, our opponents added two goals to their score, and thus won by 4 goals 1 try to 2 goals.

Guy's were beaten by a superior team; the pace set by our opponents being too fast for many of our men. The backs defended well, the tackling being good as a rule. Team:—

GUY'S.—J. J. Gardiner (back); S. P. Wadson, S. L. Pallant, W. H. Burney, E. N. Jupp (three-quarter backs); A. E. Kynaston, J. T. Hicks (half-backs); M. A. Collins, N. B. Odgers, H. Watts, G. T. Collins, A. M. Tolhurst, H. D. Smart, T. B. Layton, D. R. T. Griffiths (forwards).

GUY'S 1st XV. v. CROYDON.

(GUY'S, 21 POINTS; CROYDON, 3 POINTS.)

Played on the new Croydon ground on Saturday, February 23rd, before a fairly large number of spectators. Guy's won the toss and T. P. Thomas kicked off. At the commencement Croydon had the better of the game, being in our twenty-five the greater part of the time, and within ten minutes of starting some faulty fielding by Harrison let in Kent, one of the Croydon half-backs, who was playing a strong game, the try, however, was not converted. On kicking off again, a slight mistake by Louisson enabled Kent to get away again, and he was only just pulled up in time by Harrison, who was injured on the head in doing so; immediately after this off-side was given against us, and Croydon made a good attempt at goal. Play was now of a more even character, and Orpen making an excellent opening, enabled McEvedy to score, Morgan converting the try. Harrison, who was still suffering from the effects of his injury, missed his kick, and play was confined to our twenty-five for a short time; but some excellent foot work by our forwards carried the ball into midfield, where some very pretty combination between O'Brien and McEvedy resulted in the latter almost scoring. Play continued on their line, and some good play by Orpen enabled Morgan to score, the shot at goal being unsuccessful.

On re-starting, Harrison returned the kick-off well over half-way, Wetherell getting in some good dribbling in the give-and-take play which followed; our three-quarters getting the ball, however, almost scored by means of Orpen, who was playing one of his best games of the season. We continued to have the best of the game, Orpen making a good run and passing to McEvedy, who was tackled hard right on the line, his ankle being injured to such an extent as to prevent him from playing during the remainder of the game. Half-time was then called, the score being Guy's 1 goal, 1 try; Croydon 1 try.

On re-commencing Millsom went three-quarter, and played an excellent game, the forwards, with only seven men, more than holding their own, getting the ball in the scrum repeatedly, an opportunity the backs soon availed themselves of. Orpen, O'Brien and Morgan making a pretty run, and the last-named scoring between the posts by running right round from the right hand corner, the try was converted. The ball was then taken into our twenty-five, where one of the Croydon men made his mark, the attempt at goal being a good one;

good wheeling by the forwards relieved the pressure, and the ball was taken to the other end of the field where Orpen scored from a good opening by Morgan, the major point not being scored. The rest of the game was of rather a scrambling character, and just on the call of time, from a scramble in front of goal, T. P. Thomas scored, Morgan converting, leaving us winners after a highly satisfactory game by 21 points (3 goals, 1 try) to 3 (1 try). Team:—

Guy's.—E. M. Harrison (back); E. Morgan, L. J. J. Orpen, A. O'Brien, P. F. McEvedy (three-quarter backs); M. C. Wetherell, H. G. Louisson (half-backs); H. A. Cutler, T. P. Thomas, R. C. Lawry, A. H. E. Wall, E. H. B. Milsom, B. Glendinning, A. R. Thompson, R. G. Anderson (forwards).

Remarks.—One of the best games Guy's have played this season, and from a spectator's point of view interesting from beginning to end. The whole team played well together, and the forwards, who had been disappointing in the match or two previously, played a much sounder game both individually and collectively.

GUY'S v. R.I.E.C.

Guy's, 10 points; R.I.E.C., 5 points.

This match was played at Cooper's Hill on Wednesday, February 20th, and ended in a win for the hospital by 2 goals to 1 goal.

Owing to the United Hospitals' match we played without the members of the Cup team, but we had the assistance of P. T. Manson, M. D. Wood, and W. Llewellyn.

The game was of a very scrambling nature during the first half, Cooper's Hill doing nearly all the pressing. Half-time score, nil.

After changing over our forwards woke up, and gave our backs plenty of chances, but the opposing half-backs, who were very smart, simply beat ours time after time, but they were favoured by the views of the referee on the off-side question. Half-way through this half, Wetherell getting away from the scrum beautifully, and dodging right through up to the full-back, passed in the nick of time to Morgan, who raced over under the posts, which he converted. From the kick-off they raced away, and in some loose forward play they rushed the ball over, and the kick being successful, the match seemed likely to end in a draw.

We now were beating forward and pressing them in their twenty-five, and after some nice runs by Llewellyn and Wadson, and the former taking a pass from Morgan, raced along the touch line and scored near the posts; Morgan converted. Team:—

Guy's.—E. M. Harrison (full-back); S. P. Wadson, E. H. Milsom, W. Llewellyn, E. Morgan (three-quarter backs); M. G. Louisson, M. C. Wetherell (half-backs); T. P. Thomas, R. C. Lawry, A. H. E. Wall, H. S. French, B. Glendinning, R. H. Thompson, P. T. Manson, M. D. Wood (forwards).

Appointments.

CIVIL.

Annis, E. G., L.R.C.P. Lond., M.R.C.S., has been re-appointed Medical Officer of Health for the Borough of Huddersfield.

Brodrick, Charles Cumberland, L.R.C.P., L.R.C.S., L.M. Edin., has been re-appointed Medical Officer and Public Vaccinator for the Whitchurch and South Lydford Districts of the Tavistock Union.

University of London.

THE BROWN ANIMAL SANATORY INSTITUTE.

(Under the Government of the University).

Notice is hereby given that, in accordance with the Will of Mr. Brown, a course of Five Lectures, with special reference to the work of this institution, will be delivered by the Professor-Superintendent (J. Rose Bradford, Esq., M.D., D.Sc., F.R.S.), at the University of London, South Kensington, S.W., on Tuesdays, March 5th, 12th, 19th and 26th, at 5 o'clock each afternoon. Subject: "The Protozoa in their relation to Disease, with especial reference to the so-called Tsetse-Fly Disease of South Africa." The lectures are free to the public.

(By order of the Senate),

F. VICTOR DICKENS,

Registrar, University of London.

Births.

AUDLAND.—On February 14th, at 5, Oxford Street, Wellingborough, the wife of W. E. Audland, L.R.C.P. Lond., M.R.C.S., of a daughter.

FARNFIELD.—On February 14th, at Mere, Wilts, the wife of William Walter Farnfield, L.R.C.P. Lond., M.R.C.S., of a daughter.

Marriage.

TEBBITT–CARPENTER.—On February 14th, at Christ Church, Beckenham, by the Rev. J. Rooker, Vicar, assisted by the Rev. J. Adams, Vicar of Emmanuel Church, Streatham, Ernest Reginald Tebbitt, L.D.S. Eng., third son of the late Walter Tebbitt, Esq., of Tunbridge Wells, and Mrs. W. Tebbitt, of Streatham, to Mabel, third daughter of E. Carpenter, M.R.C.S., &c., Trevathan, Beckenham.

Deaths.

ALDER.—On February 17th, at Guy's Hospital, Henry St. Austen Alder, aged 26.

JONES.—On February 11th, at Sheep Street, Northampton, Arthur Henry Jones, M.D. Lond., aged 48 years.

Ed.—L. E. S.

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Calendar of Coming Events.

March, 1901.

Sat. 16—Messrs. Lucas and Lane's take-in; Drs., H. Barber and A. H. E. Wall; Cl., F. Curtis.
1 p.m., Clinical lecture by Dr. Taylor.
G.H.R.F.C., I., London Irish, home.
II., London Irish, away.
Last day for sending in Fees and Certificates for Camb. D.P.H.
G.H.R.F.C. v. London Hospital. Cup Tie Final at Richmond.

Tues. 19.—Application to Medical School Office for Schedules for Final Conjoint Exam. to be made not later than this date.
Dental Anatomy Exam. for 1st and 2nd Year's Prizes, 2 to 5 p.m.

Wed. 20.—1.30 p.m., Clinical lecture by Mr. Jacobson.
Dental Physiology Exam. for 1st and 2nd Year's Prizes, 10 a.m. to 12 noon.
Dental Anatomy Exam. for 1st and 2nd Year's Prizes, 2 to 5 p.m.

Thur. 21.—Messrs. Golding-Bird and Dunn's take-in; Drs., Brooke Churchill and W. W. C. Jones; Cl., P. T. Manson.
Exam. for Golding-Bird Gold Medal and Scholarship begins.
Dental Surgery Exam. for 2nd Year's Prize, 2 to 4 p.m.

Fri. 22.—Dental Surgery Exam. for 1st and 2nd Year's Prizes, 2 to 5 p.m.

Sat. 23.—1 p.m., Clinical lecture by Dr. Taylor.

Tues. 26.—First Conjoint Exam. begins.

Wed. 27.—School Exam. in Elementary Anatomy.

Thur. 28.—Messrs. Jacobson and Fripp's take-in; Drs., W. H. Bowen and M. W. Cohen; Cl., F. G. Gibson.
Second Conjoint Exam. begins.

Fri. 29.—Winter Session ends.

Guy's Hospital Gazette,

MARCH 16, 1901.

On Some Practical Points concerning Lupus Vulgaris, especially with reference to its Treatment.

CLINICAL LECTURE BY W. H. A. JACOBSON, M.Ch.

February 13th, 1901.

(Concluded.)

I turn to the subject of treatment, which here, as in other tubercular affections, is both local and general, especially the former. Before I go into detail as to the different methods, I would call your attention to some general points in the treatment of lupus.

A. Before undertaking a case, examine (1) the local disease, its duration, its extent, the damage done, the hold it has got, and the amount of mixed infection present. But do not forget the patients in examining the disease. I refer to their vitality, power of resistance, and especially to their surroundings. These points all have a most important bearing on the prognosis you will be asked to give, and the results of the treatment you undertake.

B. Warnings to patient and patient's friends. In the early stage, that of deposit, before any breaking down or mixed infection has occurred, when there is only a small patch of reddish-yellow deposit, possibly with one or two satellite-patches, on the cheek, perhaps of a favourite daughter, you will have much difficulty in initiating the radical treatment which you know to be absolutely essential, and which is so favourable at this stage. You must be very firm on two points especially. Let it be clearly understood that the condition is a "*consumption of the skin,*" that it will gradually spread and destroy like consumption of the lungs, but that you can arrest it if allowed a free hand. Be very clear and dogmatic on these points, and do not go into any so-called explanatory details. You will probably be asked about plaisters, and urged to use them, and not "the knife." I shall allude to plaisters later on. If the patient goes or is taken elsewhere, and a weaker attitude assumed and what seem gentler, kinder words used, do not let your heart be troubled. Time, which proves all things, will prove you right.

C. Before you undertake a case, inculcate the necessity of much patience and perseverance, especially in a case of long standing, and where the disease has got a firm hold. However early

you get the case, however carefully you treat it, relapses are certain, if the disease has reached the corium, but with thorough, persevering treatment—and I shall show you that no out-of-the-way instruments are required—relapses will become less and less frequent.

In long-standing cases the patient may tell you that he has been given to understand that the disease is incurable. When asked this question, I decline to spend much time on it. However discouraging the case, however late it comes to us, it is our duty not to shirk it and say, "You should have come before, and I could have cured you," but to do our best—to assure the patient that the disease can at least be arrested and kept in hand, and that important parts that will certainly be attacked, can be saved.

D and E. I put these points together. First D, the need of frequent and regular supervision. You all know the obstinate persistence of tubercular disease unless every atom of the infective granulation tissue is destroyed. It is like a field with thistles, where it is necessary to spud up, not merely cut down, every single plant. This obstinacy is especially likely to become inveteracy here, where we have usually to deal with the skin of the face—where one cannot operate on such wide lines as one would wish, and as one does elsewhere, as in tubercular arthritis. As our hands are somewhat tied in operating, the patient should be seen every month at first, with especial care during winter and spring. To say "Come again in three months," or "if your trouble shows itself again," is utterly futile and unworthy of a profession which claims to be a scientific one, and which therefore should know the tenacity of the life of tubercle bacilli.

E. Enquire into the patient's surroundings, especially when he leaves you after an operation, or when he returns from a convalescent home. One of the chief difficulties in curing lupus, and other tubercular affections, is, in many cases, due to the fact that no precautions are taken to prevent re-infection. (Dr. Wild, "Cutaneous Tuberculosis," *Medical Chronicle*, 1897, p. 422). The patient has already been proved to have been exposed to infection, and to have been susceptible to it. Is it any wonder, therefore, that on his return home, after a thorough destruction of the diseased tissues, he not infrequently comes back to the hospital in a few months as bad as before? In many of these recurrent cases it is re-infection, and not relapse or imperfect treatment which is the cause of such disheartening results.

I am sure, gentlemen, that in sending out our patients we cannot think too much or enquire too carefully into the surroundings they are going back to. I will briefly allude to two cases carefully reported by German surgeons, which throw a very striking light upon this matter.

The first is one of Wahl, of Essen (Centr. f. Chir., 1886, No. 84).—A healthy child had amputation performed through one forearm for injury, and was discharged from the hospital with the stump healed save for a small granulating sinus. He passed under the care of a girl with lupus of the nose. The spot of granulation began to enlarge, and to form fungous masses. The axillary glands also became enlarged. The child was readmitted, and the disease cured by thorough curetting. Tubercle bacilli were found both in the granulation of the stump and in the axillary glands.

The other case is reported by Kraske (Centr. f. Chir., 1885, No. 47).—A healthy boy, æt. 11, had been under treatment for acute osteomyelitis, and was sent out with a small healthy granulating surface, and a soundly-healed sinus. Seven months later he was readmitted. The granulating surface was not healed; on the contrary, two additional openings had made their appearance with fungous caseous granulations. The wound had been dressed daily in a small room in which a sister lay who recently died of tuberculosis. The boy slept and kept his dressings in this room. The healed sinus remained soundly healed. Microscopical examination of the granulating surface showed tubercle and tubercle bacilli. The diseased surfaces were again thoroughly curetted, and the boy was again discharged with a healing surface. The case is not carried further.

F. No one method will suffice. In each case several should be combined.

G. No out-of-the-way instruments are required. To both of these points I shall refer later.

H. Remember the great vascularity of the skin, and bear in mind the possibility of setting up too much congestion and irritation in such a part. So, too, if a patient come to you for treatment with lupus in a state of congestion and irritation, defer operation for a while. In such cases boracic acid fomentations will bring about much improvement.

I. General anæsthesia. Owing to the exquisite sensitiveness of the skin, I urge on you to avail yourself of this in every case. Anything like thorough extirpation of the disease, however small it appear to be, is otherwise hopeless. Now that you all have opportunities of becoming

anæsthetic clerks, of gaining practical experience in this matter, you will have no excuse for not availing yourselves of this most needful assistance, especially if you make yourselves safe by giving ether first, and then, if needful, chloroform. Local anæsthesia in any form is unreliable. The least movement on the part of the patient, the least alteration in the feel of the tissues operated upon (as after the adoption of freezing the tissues) render the operation incomplete.

J. The attitude of the surgeon towards the infective granulation tissue of tuberculosis. I have spoken of this tissue, and how by its persistence, its extension into nooks and crannies, it favours relapses. We see this perhaps best in a case of tubercular osteitis in a bone like the tibia. The disease is thoroughly exposed by chisel and mallet, it is thoroughly curetted out by the repeated use of a flushing scoop; the cavity is completely dried out. All around the bone looks healthy, a metal instrument rings naturally against the bony walls. Perhaps additional care is taken by inspecting with a small electric lamp. A few weeks later, as the cavity closes up, a small ominous patch of characteristically fungous granulation, with light yellowish specks in it, makes its appearance. The mischief is scotched, not killed, and there is nothing for it but to repeat the curetting, perhaps more than once. If this is so in the case of a bone, where one can operate deeply and on wide lines, how much more must it be true with the skin of the face, where all the conditions favourable for thorough operation are so distinctly wanting? Our aspect towards this rebellious, obstinately persisting tissue ought to be as watchful and expectant as that of those who are watching a room where a fire has been put out, but where there is reason to suspect that a joist is still smouldering below.

Erasion or curetting.—I place this first as, on the whole, it is the most generally applicable to the largest number of cases. It has the following advantages:—(1) It does a great deal in a very short time, being especially adapted to the second stage, that of mixed infection. When the tubercular granulation tissue has broken down and is covered by the usual yellowish-brown scabs, it removes all these in a few seconds. Do not forget in using this method to treat the edges and base thoroughly. (2) Its use is not followed by prolonged pain. (3) The wounds it leaves heal quickly, though, as I shall show, not perfectly. (4) If the curette be not over-used, the scars which follow are satisfactory. And this leads me to another point, the curette must be used with discretion, and, as it were, as a means of diagnosis between the diseased and healthy structures. When all the soft broken-down tissue has been scooped away, and the base and edges carefully attended to, care must be taken not to damage the surrounding tissues. The amount of resistance is the best guide. As soon as any force is required, you should hold your hands, or you will inflict needless damage, add needlessly to the deformity, and bring about thick scars. When the use of the curette ceases, other methods should come in to complete the work. Too much must not be expected of this method. It is necessarily incomplete. When all that can be removed is gone, there still remains in the firmer floor and in the firmer edges small foci of tubercle nesting in the interlacing bundles of the corium. The curette, of course, glides over these without picking them out. This is one reason why I said that in every case more than one method should be employed. To destroy these foci,—and scrutinize most closely for yellowish or reddish specks,—you must use a tiny spoon such as these (Hebra's spoon and Macewen's tympanum curette), or you must employ linear and punctiform scarification, or a finely-pointed cautery, of which I will speak in a moment, or a finely-pointed stick of silver nitrate, or pointed sticks of hard wood, *e.g.*, of cedar or oak—soft wood, such as deal, especially when soaked in acid, is prone to double up at the point before it reaches and destroys the small foci of lupus—soaked in acid mercury nitrate.

I have said that erasion is necessarily incomplete, but it is often used in a way that makes its results needlessly incomplete; and, therefore, I think this method has not had justice done it. Thus, the curette used is often too large, the nests in the base and edges are forgotten, or it is used in cases to which it is unfitted, *e.g.*, those where much fibrous tissue is present.

There is, of course, very free bleeding from the enlarged vessels of the naturally vascular skin. This always yields to pressure firmly applied for a sufficient time. It is necessary, absolutely necessary, to apply this pressure efficiently, or numerous nests of tubercle will be overlooked in the bleeding surface.

The best application after the operation is, on the whole, one of boracic acid. The after-pain for a short time is severe, and it is well, remembering the risk of relapses, not to try too severely the patient's power of endurance.

Scarification. — Two methods, linear and punctiform.

This method has great advantages, if used in the right cases, and in the right way. The objects of scarification are, first, by obliterating the blood-vessels over a wide area, to cut off the nourishment of the bacilli, and, later on, to obliterate the disease by producing a widely diffused scar tissue, delicate and sound alike in structure.

Thus, scarification is especially suited to cases of diffuse lupus, and in lupus seborrhagicus, where there are no definite tubercles, but a thin layer of lupus tissue affecting chiefly the lower part of the nose, where the soft parts are normally of no great depth. In linear scarification the cuts should be made in four directions, vertically, horizontally, and from left to right, and from right to left. Each series of cuts should pass deep enough to reach the deeper corium and the disease. This is effected by drawing the blade of the knife in the direction required from the apparently sound skin on one margin across the diseased spot into apparently sound skin at a corresponding point on the other side, the blade being at the same time pressed deep enough to pass through the whole thickness of the morbid tissue into the healthy tissue below. Auto-infection is a bugbear much written about by Velpeau, but does not occur in practice. The bleeding is very free if scarification is carried into the proper depth, but is arrested by firm pressure kept up steadily for two or three minutes. In making the series of cuts each incision must be close to its fellow, and all should be made perpendicular to the surface. If one is made perpendicular and the next oblique the result will be cutting out of a minute slice of skin. If this were done freely, much scarring would result. It is multiple incision, not excision, which is wanted. The advantages of scarification are considerable. I have already spoken of the cases to which it is suited, where the lupus is diffuse, where it persists about the orifice of the nose, a region where too vigorous treatment may easily produce deformity. Other indications for its use are persistent nests in scar tissue, or scars which are sound but unsightly from their size and thickness. Linear scarification produces marked atrophy and improvement here. The employment of this method is not followed by much pain, and for this reason, and the little deformity scarification causes and the rapid healing, I find that patients will usually submit to this method readily. The rapid healing and the very little scarring left are both explained by the fact that every minute slice has a layer of epithelium left upon it when the method has been employed over scars or nodules of lupus which have not broken down. The disadvantage is that it is liable not to do enough. It must be used thoroughly, deeply enough, and there must be sufficient cross cutting to mince the tissues finely.*

Otherwise the results will be disappointingly small. No out-of-the-way instruments are required. A sharp scalpel suffices for linear scarification, and with a little practice will do the work very rapidly. The multiple scarifiers, in which several blades are sprung into the diseased tissues at once, do their work a little more exactly, uniformly, and quickly, but they are expensive, they are adapted to this special purpose only, and their mechanical advantages will be soon made up for by practice with simple and more useful instruments. The other method of scarification—"Punctiform"—is much less useful than the linear method; obviously so, as even if hundreds of minute punctures could be distributed uniformly—here's the difficulty—into a diseased patch, the amount of scarring would be infinitesimal. It may be combined with the other, especially for destroying very minute deposits in scar tissue, though here I prefer a fine cautery. If this is not obtainable for the destruction of more minute foci, much simpler means will suffice, viz., fine-pointed bradawls, eye-spuds, cataract needles, or the finely-pointed pieces of hard wood spoken of above, soaked in acid nitrate of mercury.

Cautery. — This, whether actual, galvanic, or benzolin, should only be used very fine-pointed, in combination with other methods, and with the following objects, (1) to destroy nodules nesting in the base of a curetted patch in the interstices of the corium, or any small recurrent nodules in scars; (2) by itself to destroy any isolated nodules, especially where other methods are less suitable, as near the junction of the eye-lid and nose. When used, the point should be at a cherry-red heat; a dazzling white heat tries the eyes and interferes with exactitude in the use of the cautery. To destroy a large patch of lupus with the cautery only, using the larger Pacquelin blade, is not to be recommended. It can only be used on parts where the lupus is covered, as on the trunk. The sores left are tedious in healing, though not very painful, and the scars which follow are liable to be very thick and keloid.

Excision, and Thiersch's Grafting.—By many this method would have been placed first and foremost. By some it is spoken of as not only the best but the only one required. It is spoken of as the only radical cure, and therefore to be

* Owing to the blood-supply there is no risk of sloughing.

preferred, and we are advised that we should treat lupus by excision just as we excise other new growths out of healthy tissue. Unfortunately the pathology of lupus militates strongly against the correctness of the above statements. Excision may be employed for lupus on the trunk successfully, but here, as after other methods, the patient is liable to relapses and will require watching. But it is on the face that lupus vulgaris is chiefly met with, and after a trial of excision I have come to the conclusion that its results are not permanently better than those of other methods, while it may lead to additional deformity. My reasons for the above given conclusions are the following:—

(1) Lupus of any duration extends, as we have seen, into the deeper parts of the true skin, and even into the subcutaneous fat; this, in the face, contains the muscles of expression, and thus an additional risk of deformity arises. The tissues adjacent to the growth contain microscopical nodules of growth far beyond the area at which they are visible to the unaided eye. The usual advice given to excise a margin of apparently healthy tissue, a quarter or half an inch wide, is, I think, quite insufficient. Dr. Norman Walker, one of the physicians in charge of the skin department of the Edinburgh Hospital, writes (*British Medical Journal*, 1893, Oct. 28th, p. 940). "Excision must be very wide of the disease, for each of the patches removed shewed early nodules far beyond the area where they were visible" It is obvious that this absolutely needful freedom in excision of tubercular disease will not always be permissible in lupus of the face, when we consider how it attacks the parts near the middle line. Other objections which I met with were:—The difficulty of rendering the tissues of the face aseptic, as they are too delicate to stand any thorough cleansing, and the proximity of parts like the eye renders this additionally difficult. Even if the lupus has been removed with sufficient freedom, which is not usually possible, it is not very easy to keep dressings on the face so securely as to maintain asepsis, especially if the lupus be close to sources of infection such as the mouth, the nose, the eye. And the same objections occur in the second stage of the operation when the patch is covered with grafts by Thiersch's method. Lastly, supposing we are able to cut as widely as we wish of the patch, the actual removal is not easy. As one cuts beneath it—and here I think blunt-pointed curved scissors are preferable to the knife—it is very difficult, owing to the friability of the lupus patch and the delicacy of the infective granulation tissue, to get it away *en masse*, the patch breaks down and leaves foci behind. For these reasons I have ceased to advise excision of lupus save on the trunk, and in cases of the localised warty form.

Plasters. Caustics.—I must mention these, as some of you will certainly be asked if there is not other remedy than "the knife." The conclusion to which my experience has led me with regard to plasters is this, that if they are strong enough to be efficient, their action is very painful, and that they may do too much. If, on the other hand, they are made weaker, and are less painful, they are inefficient. Such plasters are those containing salicylic acid, arsenic, zinc chloride, and so forth. If you have to try any, use one of salicylic acid, twenty to fifty grains, with half a drachm to a drachm of creosote, and one ounce of vaseline. This is highly recommended by Unna and the late Mr. Anderson. The weaker strength is very slow, the stronger more efficient but very painful. The creosote is added to diminish the pain, but in my experience is of little efficiency. The above is applied, on lint, night and morning, and in a few days the lupus nodules appear as greyish sloughs, which can be removed with pledgets of lint. Other plasters are of arsenic and zinc chloride, *e.g.*, arsenious acid twenty grains, artificial cinnabar three grains, vaseline one ounce, or one of zinc chloride, liq. opii. sedat., starch and water. Either is spread on lint and kept on with a bandage for twenty-four hours. The following objections prevent my recommending this treatment. (1) The pain is very severe, lasting all the time with arsenic, at least six hours with zinc chloride, and requiring injections of morphia. As a rule, especially with young subjects, patients refuse to continue this treatment long enough. We must remember the part we are dealing with, and the exquisite sensitiveness of the skin, especially that of the face. (2) The effect on the tissues. Arsenic attacks only the diseased tissues, zinc chloride everything it comes in contact with, and thus is liable to cause thick, seamed scars. (3) If used over a large surface arsenic may be dangerously toxic. (4) Any one of them, the salicylic plaster least of all, are liable to aggravate the disease and to produce such painful swelling as to call for soothing remedies, and thus to cause delay. (5) None of them do more than remove the disease up to a certain point. They remove the superficial part of the nodules, they render them, perhaps, fewer in number, but, from what I have seen, as the surface heals, nodules persist, and the patient's fortitude being exhausted, some

other treatment has to be adopted. This course, in my opinion, it would have been better, both for the patient's mind and disease, to have adopted at first. If you want any information on two other remedies, *thyroid extract and the treatment of certain light rays*, I can only say that I, personally, have no experience of them. That thyroid extract will temporarily improve lupus as it improves other conditions not connected with the thyroid body, I am prepared to admit. It has been largely tried, and I am right in saying that it has never cured a single case. As to the treatment by light, whether sunlight, or electric light, or X-rays, this is *sub judice*. I will only remind you that in large towns—and here alone will the necessary staff and apparatus be provided—there will be but little sunlight at the time of year when it is chiefly important to attack lupus, and that the supply of the extra violet rays which possess the chief bactericidal power is especially likely to be scanty. If electricity has to be used, this means a costly apparatus. It is very doubtful how far the X-rays possess of themselves any bactericidal power; in other words, they will probably act only through their power of setting up a dermatitis. How far an irritation alone will kill organisms with a vitality like that of the tubercle bacilli is, in my opinion, most doubtful. At all events, as the London Hospital has acquired the necessary apparatus, we shall, in a few years, have an opportunity of forming sound conclusions as to the value of the treatment of tuberculosis of the skin by light alone. In the meantime I would advise you to remember the tendency of the present age to give up old remedies which have been proved to be useful, and to rush to "the last new idea," just because the age can cry, "Lo! here is something new." The journals now contain most favourable accounts of cases treated in this way, speaking of them as *cured*, though only a few months have elapsed, and drawing attention to the excellent supple character of the scar. For my part, I shall remember the old, well-tried, and much simpler methods, and the numerous instances in which novelties, much lauded at the time, such as oxygen for the treatment of ulcers, have been proved of very little real value on an extended scale, and have been forgotten. I shall not forget that this treatment by light involves an expensive plant, that the method is very slow, and that every case of tubercular disease, wherever situated, must be carefully watched for at least two years before it can be pronounced to be cured.

The Treatment of Uræmia.

The Treasurer's Prize Essay, by H. S. French, read before the Physical Society on Saturday, March 9th, 1901.

In considering the Treatment of Uræmia, it is unnecessary to enter into a full discussion of the whole subject of uræmia. Its ætiology, diagnosis and prognosis will, in the following essay, be scarcely touched upon.

Nevertheless, before proceeding directly to its treatment, more than a few words are indispensable under the three following headings:—

1. A definition of uræmia.
2. The varieties of uræmia.
3. The pathology of uræmia.

Without some clear understanding, or at least working hypothesis, as to what uræmia is, what forms it may take, and what diseased condition it is due to, the treatment of uræmia, imperfect as it is, can scarcely be directed towards progress and improvement.

I. *A definition.*—The name uræmia is used for a group of symptoms arising during the course of many renal diseases; always grave, not infrequently fatal, and dependent mainly, but not entirely, upon derangement of the functions of the nervous system.

Uræmia, more or less severe, may occur in almost all diseases of the kidney. Most commonly, no doubt, in cases of Bright's disease—acute tubal, chronic tubal, and chronic interstitial nephritis; but also in lardaceous kidney; tuberculous, calculous, and cystic diseases; in hydronephrosis and in ascending nephritis; even in active or passive congestion of the kidneys. Sometimes the kidneys themselves are not the primary source of the trouble, as when both ureters are simultaneously blocked by calculi or other cause, and there is what is termed complete "suppression" (better, perhaps, "repression") of the urine; a distinct variety of uræmia then follows, referred to below as latent uræmia.

II. *The varieties of uræmia.*—There is no sound basis upon which to rely in dividing uræmia into one or more kinds. From the discussion below upon the pathology of uræmia, it will be seen that nothing is actually *known* about uræmia at all. There are theories and hypotheses not yet proved. It is not possible to say that such and such cases of uræmia are due to one cause, whilst such and such others are due to another. As far as is at present known, all cases of uræmia may be, and perhaps are, due to the same causes, in which case there would be no different varieties of uræmia. All would be the same, pathologically, varying in degree only.

Nevertheless, five different classes of uræmia may be made clinically, each with a somewhat different form of treatment. These are:—

1. *The fulminating group.*—In these, a person who was perfectly well to all appearance a few minutes before, may after a very short period of delirium, or even without, suddenly become drowsy and then rapidly comatose, with contracted pupil, excessive knee-jerks and sub-

normal temperature. In an hour, or a few hours, he is dead.

2. *The acute group.*—In these the symptoms are chiefly of a nervous type, and are of many forms. Sometimes uncontrollable twitchings of the face, arms or other part of the body may give warning of the impending danger. Often there is no such warning, and the onset is quite sudden.

The most striking form consists in the occurrence of convulsive fits, with loss of consciousness. Such epileptiform paroxysms are seen sometimes in patients who are already confined to bed with dropsy, or suffering from other effects of Bright's disease; sometimes in those who are still engaged in their daily occupations, or who may even be apparently well.

The convulsive paroxysms are identical in every detail with those of epilepsy, even to the biting of the tongue, the foaming at the mouth, the involuntary discharge of urine and fæces, and the subsequent sleep or stupor. A full description need not be given here. The temperature may rise several degrees, reaching 102° or 104°, or, as in one case at least, 107°. During the coma which follows, the temperature frequently falls below normal to 95° or even 94°.

In many cases, before the insensibility has passed off after one uræmic paroxysm, another sets in, and thus twenty or more may occur in succession. The disease then is very likely to prove fatal. But even after a series of fits it is not uncommon for recovery to take place. The convulsions cease, and the patient regains consciousness, to the surprise of his friends.

Sometimes, instead of the uræmic fit having the typical epileptiform character, its symptoms are of a different kind. In certain instances it may take the form of sudden *maniacal frenzy* or delirium; in others, of sudden *extreme dyspnœa* of a peculiar hissing character. Or again, it may simulate a *hemiplegia* or *monoplegia* of sudden onset, with no gross lesion to be found at death to account for it. Another form is that of persistent *inability to sleep*, associated with twitching, cramp and hiccough, without clouding of the mind, or coma, in which case death occurs quite suddenly from respiratory failure. These, however, are all rarer forms.

The onset of acute uræmia, as has been said, may be either sudden, or preceded for a few hours or days by headache, drowsiness, vertigo, a strange fixed expression of face, dragging pains in the extremities, or a transient rigidity or spasm of the face, or of the lower jaw, or of a limb. Nausea, again, and even vomiting, may be a prodromal symptom; and not infrequently a functional and transient loss of vision, known as amaurosis, may precede the uræmic attack, or perhaps constitute its only symptom.

3. *The Chronic Group.*—In these, the symptoms are less obviously cerebral. The lungs or the digestive organs may appear to be the parts affected. But there is good reason to believe that even in such cases the starting point of the symptoms is generally, if not always, in the brain.

The evidently cerebral symptoms usually consist of *headache*, *giddiness* or *drowsiness*, any of which may go on for weeks or months, either continuously or with intermissions. The patient's aspect is often remarkably dull and expressionless; he is mentally slow; he lies in bed, taking no notice of what goes on around him, and altogether indifferent to his own condition. Ultimately, he may fall into a complete stupor, lasting perhaps for days, before he dies.

In other cases the principal indication of chronic uræmia is *dyspnœa*. This is generally paroxysmal, and is apt to come on at night, like asthma. The type of breathing named after Cheyne and Stokes is not infrequently observed in cases of chronic uræmia.

Another sign of uræmia may be intense *itching* of the skin, with constant scratching and rubbing. Whether or not the skin eruptions which may occur in patients with Bright's disease are uræmic in origin is not so certain.

One of the most characteristic symptoms is *vomiting*. At first it may occur only in the morning when the stomach is empty. Afterwards it may take place whenever food is taken, and become exceedingly intractable, continuing for weeks, or even for months. Possibly it has a cerebral origin, but some have thought it due to the presence of urea or other body in the stomach; the vomited matter often contains quantities of urea.

Hiccough is not uncommon, either alone or in association with other effects of uræmia. It may be very distressing.

Diarrhœa is of rather frequent occurrence and often accompanies vomiting. It sometimes seems to depend upon an inflammatory affection or even ulceration of the intestinal mucous membrane, and there is some doubt as to whether it is strictly of uræmic origin. Cohnheim and other recent writers think it is rather an effect of local irritation from carbonate of ammonia produced by decomposition of urea in the intestine.

4. *The Eclamptic Group.* — Women with Bright's disease or other well-defined renal affection may become pregnant. Pregnancy does not protect them from either the fulminating, the acute or the chronic forms of uræmia discussed above. But, with or without actual renal disease, pregnant women, in the later months of pregnancy, are liable to a special affection known as puerperal convulsions or eclampsia. These convulsions resemble those of uræmia; and Lever, in the Guy's Hospital Reports for 1842, first pointed out that in the great majority of cases they were associated with albumen, in larger or smaller quantities, in the urine. Cases have since been recorded in which albumen has been absent from the urine at the time of the puerperal convulsions, though it appeared subsequently. One or two cases have been described where no albuminuria was found throughout. The general view at present seems still to be that puerperal convulsions are uræmic.

The albuminuria with which they are associated is not that of acute or chronic Bright's disease necessarily.

In many cases the albumen disappears completely from the urine so long as the woman is not pregnant, to reappear with each succeeding pregnancy. The causation of such puerperal albuminuria must be discussed again under the heading of the pathology of uræmia.

The puerperal convulsions themselves may occur during the later months of pregnancy, usually the eighth or ninth; during labour or after delivery.

They are acute. There may be no premonitory symptoms at all; usually, however, they are preceded, for, at any rate, some hours, by severe headache, accompanied by flashes of light, or amaurosis; by nausea or vomiting; vertigo; or slight muscular twitchings in some part of the limbs or body.

Then follows the convulsion itself. It is epileptic in character, and a detailed description is unnecessary. It is followed, for a short time, by a partial degree of coma, with stertorous breathing. Consciousness may return with confusion of ideas for a time, and no memory of what has occurred. But the special character of the convulsions is that they recur. In mild cases there may be only a few fits at long intervals, and consciousness may always return in the intervals. In severe forms the convulsions recur with increasing frequency, and in some instances more than one hundred have occurred. Sometimes they follow in such quick succession as to appear almost continuous. They tend towards coma and death. In the Guy's Hospital Charity, up to 1875, twenty-five per cent. of all cases of eclampsia proved fatal.

5. *The latent group.*—These are seen as the result of a special, and necessarily rare, condition, namely, complete obstructive suppression of urine. It is seen when both ureters are obstructed simultaneously, without relief; or, more commonly, when bilateral calculous disease has led to the complete destruction, or surgical removal, of one kidney in the past, and then the ureter of the sole remaining kidney is obstructed, and no urine is passed.

The symptoms in this class are remarkable for their slight intensity, and for this reason the term "latent" uræmia is applied to such cases. Such patients will live for seven, ten, or even fourteen days without expelling any urine. They remain conscious almost to the end, and all the so-called uræmic symptoms are conspicuous by their absence. There is little or no headache and nausea; vomiting is usually absent; the patient, if he complains at all, will say he is a little weak and drowsy; the pupils contract; the temperature is subnormal, and these apparently trivial symptoms may be the sole evidence of an exceedingly grave state of affairs. After some days of complete suppression, slight twitchings of the muscles may or may not be seen, and with little, if any, mental disturbance or confusion, the patient dies suddenly from respiratory failure.

III. *The pathology of uræmia.*—There are, broadly speaking, two distinct groups of causes which have been invoked to account for the production of uræmic symptoms. These are:—

1. Changed physical conditions within the cranium.
2. Changed chemical conditions within the blood.

1. *Changed physical conditions.*—Traube, many years ago, attempted to explain uræmia by concurrence of hydræmia and increase of arterial pressure in producing cerebral œdema and consequent anæmia.

Cerebral œdema is seen, no doubt, in cases of fatal uræmia; but many cases have been recorded where no trace of œdema of the brain has been found. In many instances, indeed, the brain is found after death to be perfectly dry; and when it is œdematous, Bartels is probably right in thinking that this is an effect, rather than a cause, of any convulsive seizures that may have occurred. Sometimes minute spots of hæmorrhage are found in greater or less numbers in the substance of the brain. It seems most likely that they also are produced by the disturbance of the intracranial circulation, which cannot but accompany the uræmic paroxysm; their occurrence is far too exceptional to admit of their being regarded as its cause.

Cerebral anæmia will undoubtedly produce many of the effects so often seen in uræmia. For instance, convulsions, epileptiform fits, Cheyne-Stokes' breathing, coma, can all be brought about experimentally by ligature of one or more of the cerebral arteries; and it is possible that cerebral anæmia may be responsible for some of the phenomena seen in uræmia. But Roy has shown that there are no vasomotor nerves to the cerebral arterioles. The state of the cerebral vessels is mainly dependent on the state of the vessels at large. In Bright's disease, therefore, with a high blood-pressure throughout the body, the blood-vessels of the brain should be unusually full; unless, from œdema, they were compressed mechanically, and it has been shown above that œdema is not always present in uræmic brains.

One of the principal reasons for looking upon uræmia as dependent on physical causes is the fact that uræmia is so often associated with a granular or cirrhotic kidney. This condition is one in which, owing to the existence of extensive lesions in the vascular system producing great thickening and narrowing of the arteries, it is possible that anæmia of the tissues might be produced Uræmia in these cases is common when the blood-pressure is high; and, notwithstanding the thickening in the arteries, the blood-pressure in this disease frequently varies and a temporary increase in blood-pressure and uræmic manifestations have long been known to be associated. Further, venesection, or a spontaneous hæmorrhage, such as epistaxis, will frequently relieve at the same time both the increased tension and the uræmia. These are the principal reasons which led Traube to form his celebrated hypothesis of cerebral œdema and anæmia. Possibly these physical factors may account for some of the symptoms of uræmia; for example, the severe and persistent headache of the chronic variety; indeed, as will be seen, they afford a pathological guide in treatment by bleeding and cupping. But, from the evidence set forth above, they are insufficient to account for all the symptoms of

uræmia, and therefore this, the older theory, has been more or less displaced by the more modern chemical or toxic hypothesis.

2. *Changed chemical conditions.*—The hypothetical toxic substance may appear in the blood under one or more of the following conditions:—

1. That a body that ought to be, and normally is, excreted, is retained.
2. That such a body undergoes an abnormal decomposition in the blood or tissues.
3. That the tissues, as a result of quite abnormal metabolism, produce a body which ought never to be produced, and which possesses toxic properties.

Each of these must now be considered separately:—

1. *The retention of a body which ought to be excreted.*—This is the simplest explanation of uræmia, and one very generally accepted. The difficulty is to discover what the retained body is; up to the present no body, normally present in the urine or not, has been conclusively proved to be the cause of uræmia.

The name of the condition itself points to the belief of the earlier observers that *urea* was the body in question. The blood normally contains, approximately, ·015 per cent. of urea. In renal disease without uræmia this may rise to ·15 per cent., and this at a time when the patient is excreting quantities of urea within the limits of health. With the supervention of acute uræmia the quantity may rise in the blood-vessels to ·4 or even ·5 per cent. Urea may also be discovered in considerable quantity in the various secretions. It has been found in the saliva, in the matters vomited from the stomach, in the motions, in the expectoration of concomitant bronchitis or pneumonia. (Fleischer.) It may be secreted in large quantities from the skin. Dr. Taylor, in the Guy's Hospital Reports for 1874, records a case of a patient in whom, two days before death, the face, neck and hands were covered with white powdery masses of urea.

At the same time, in many acute cases of uræmia, the total urine is much diminished with the onset of uræmic symptoms, and at the same time the total urea excreted may fall enormously.

In spite, however, of all the above evidence that urea may be the cause of uræmia, there are clinical and experimental facts which argue strongly against it.

Experiments by Voit and Oertel, and others, have shown that large quantities of urea can be injected into the vessels of healthy dogs without producing any of the symptoms of uræmia. If the ureters were previously ligatured, uræmic symptoms did occur, when urea was injected; but it was shewn that the same happened, in precisely as short a time, when the ureters were ligatured and no urea was injected; so that, as long as the kidneys were free to act, urea did not behave as a poison. The experiment does not compare exactly with the pathological condition in man; but it seems to show that urea, by itself, is not a toxic body.

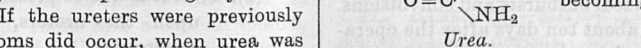
The clinical objections to the urea theory of uræmia depend upon the fact that the occurrence and the severity of the paroxysms bear no necessary relation to the quantity of urine secreted, and that the blood sometimes becomes loaded with urea without any such symptoms appearing. This is very strikingly seen in cases of latent uræmia, described above, as a result of bilateral obstructive suppression of urine. In spite of the continuous accumulation of urea in the blood, symptoms are completely absent for days and days; and in the end the uræmia, though sudden and fatal, is, in its outward signs, of slight intensity.

The characters of the urine in cases of Bright's disease at the time when uræmia develops itself differ in different cases. As a rule, the renal secretion is very much diminished in quantity for several days before the symptoms set in; it may be even completely suppressed. But sometimes there is a normal flow of urine, although it contains less than the due amount of urea, and sometimes the quantity of urine and of urea may be above the normal. Wagner gives one case where, for three consecutive days before the onset of uræmia, seventy ounces of urine were passed daily.

In connection with the apparent diminution of urea passed during uræmic attacks, it must be remembered that the patient is probably having little or no food; that his bowels are being opened frequently, each time with the loss of some urine and urea; and often there is incontinence, so that urine and fæces are passed into the bed, and cannot be measured. A patient, after an abdominal operation, at rest in bed, with practically no food at first, may often pass no more than ten to fifteen grammes of urea in the day. And yet, when a uræmic patient, likewise in bed and having no food, or vomiting what he does take, passes ten grammes of urea in twenty-four hours, it appears at first sight as though his urea were diminished.

Urea, then, seems not to be the uræmic poison. Still less is known about uric acid, hippuric acid, creatinin, or other normal urinary constituent, in relation to the causation of uræmia. Cohnheim declined to single out any single ingredient of the urine as the uræmic toxine, but ascribed the condition generally to retention of all the solid constituents.

2. *The abnormal decomposition of some retained excretory product.*—When it became evident that urea was not the cause of uræmia, Frerichs suggested that the poisonous agent was really *carbonate of ammonia* formed in the blood by decomposition of urea, thus:—



Urea. *Ammonium carbonate.*

By Frerichs the decomposition was thought to occur in the blood itself; by Treitz in the intestine, into which urea was vicariously excreted, to be reabsorbed again as poisonous ammonium carbonate. It was shown that injection of this body into the vessels of dogs produced convulsions, coma and death; and at one time the theory was widely adopted; but it has since been almost entirely abandoned. For, in the first place, the symptoms produced by thus injecting ammonium

carbonate into dogs, though somewhat like those of uræmia at first sight, do not show a really close resemblance; and many other salts have been shown to produce like effects. And secondly, many observers fail to detect carbonate of ammonia in the blood of uræmic patients, and there appears to be no doubt whatever that, if present at all, it is not in sufficient quantity to account for the effects attributed to it.

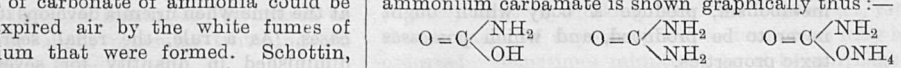
One clinical point which Frerichs adduced in support of his view was that by holding a glass rod moistened with hydrochloric acid near the mouth of a uræmic patient, the presence of carbonate of ammonia could be recognised in the expired air by the white fumes of chloride of ammonium that were formed. Schottin, however, showed that many uræmic patients failed to give this sign, whilst many other patients, such as those with typhoid fever, might readily give it, the ammonia being derived, not from the air from the lungs, but from the decomposing food and saliva in the sordes of the mouth.

3. *Abnormal bodies due to errors of metabolism in the tissues.*—That the kidneys in some way—perhaps through some "internal secretion"—have a remarkable influence upon the proteid metabolism of the rest of the body, was shown by Dr. Rose Bradford's experiments, published in the Proceedings of the Royal Society for 1892. By experimentally removing, first, part of one kidney, and, later, the whole of the other, he found that when the available kidney substance was thus greatly reduced, the amount of urine excreted, and also the total urea in it, were not diminished, but actually increased. At the same time, the quantity of nitrogenous extractives in the blood and tissues rose as much as twenty-fold. The muscles of the animal wasted rapidly, and death followed, with tremors, debility and emaciation, after days or weeks. From analogy with other organs, it was held that the kidney had an internal secretory as well as an excretory function, and that a certain amount of kidney substance was necessary to produce the internal secretion required for the proper nitrogenous metabolism of the body.

The experiments of Halm, Neucki and Pawlow upon the liver must next be mentioned. These authors investigated the effects of throwing the liver out of the circulation by connecting the portal vein directly with the vena cava inferior through an Eck's fistula. The dogs, after the operation, though formerly gentle and obedient, now became bad tempered, obstinate, irritable, restless, and liable to maniacal outbursts and convulsions. This condition comes on about ten days after the operation, and with the convulsions consciousness is lost; recurrent convulsions lead on to coma and death, the latter being accelerated by giving proteid food. Besides these symptoms, the animal may suffer from diarrhœa and vomiting. The clinical picture, therefore, is closely similar to that observed in uræmia.

In this connection it is important to note that the symptoms of acute yellow atrophy of the liver, a condition in which disorganisation of the liver is extreme in many respects resemble those of uræmia; vomiting, convulsions, coma, and urine changes are present in both.

Halm, Neucki and Pawlow found that the urine of their animals showed a diminution in the amount of urea, a constant increase in the amount of uric acid, an increase in the amount of ammonia, which was often five or six times as great as normal, and a very great increase in carbamic acid. The ammonia is excreted as carbamate: and in the blood they found a salt of carbamic acid. The relation of urea to carbamic acid and to ammonium carbamate is shown graphically thus:—



Carbamic acid. *Urea.* *Ammonium carbamate.*

They conclude, therefore, that the symptoms are due to poisoning with a carbamate which, if the liver had been able to act, would have been converted into urea. For Schultzen and Neucki have shown that amido acids, of which carbamic is one, are obtained by hydration of proteids, and are converted into urea in the body, probably by the liver.

Putting together these experiments with those of Dr. Rose Bradford, the suggestion might be made that the symptoms of uræmia are not immediately due to the renal condition, but to the disorganization of the hepatic function of forming urea from ammonium carbamate, brought about, perhaps, by the absence of an internal secretion, which the kidneys should supply.

This, however, is at present a mere theory. It must be admitted that no particular poisonous body has yet been identified as the cause of uræmia. Nevertheless, the feeling is almost universal that uræmia is due to some toxic substance or another, whatever it may be; and it is upon this pathological basis that the principles of treatment of this condition are largely based.

A word or two must still be said about the pathology of puerperal albuminuria and eclampsia. When actual Bright's disease is not present, the condition is evidently dependent in some way upon the pregnant uterus; and, therefore, in the treatment of the condition, the possible removal of the fœtus must be considered, as will be seen. The different views as to the pathology of the condition may be summarized shortly as follows:—

(1). That it is due to pressure upon the renal veins from the gravid uterus, with consequent congestion and cyanosis.

(2). That it is due to pressure of the enlarged uterus upon the ureters, and consequent partial suppression.

(3). That it is due to the increased work thrown upon the kidneys by their having to excrete the waste products both of mother and of fœtus.

(4). That it is due to the increased arterial tension which is usual in pregnancy.

(5). That it is due to a reflex nervous influence starting from the pregnant uterus as a source of irritation.

(6). That it is due to a special sort of micrococcus.

(7). That it is due to inflammatory processes in the placenta, of which little is known, giving rise to a toxin which passes into the general circulation.

Whether any, or all, of these hypothetical factors may assist in the production of eclampsia, is not known with any certainty. All that can be said is that this comparatively rare form of uræmia is associated with pregnancy, and whether it is toxic or not, it is aggravated by the presence of the enlarged uterus with its fœtus.

(To be continued.)

Guy's Hospital Officers' and Servants' Annual Dinner.

The above annual dinner took place on Monday, the 4th inst., at the Bridge House Hotel. Mr. Henry Williams took the chair, and was supported by the Treasurer, Mr. Cosmo Bonsor, and Drs. Perry and Shaw. After the usual toasts of "The King," and "The Queen Consort, the Duke and Duchess of Cornwall and the rest of the Royal Family" had been proposed by the chairman, Mr. Kirkland was called upon to propose "Prosperity to Guy's Hospital." In a most able speech he emphasized the fact that everyone employed, in whatever capacity, at the hospital, was engaged in helping on a great public work, and he felt sure that the same Guy's spirit which pervaded the Medical Staff, the Students and the Nurses, was also present among the Officers and Servants of the hospital.

Mr. Cosmo Bonsor, in replying to the toast, said that naturally on occasions like the present we looked to the fellowship which existed between all classes of workers at Guy's. It was for each to remember that he was privileged to share in the great work now going on, to which Mr. Kirkland had referred —a work which eventually would make Guy's Hospital not only the best institution of its sort in London, but the best of its kind in the world. Inevitably the Treasurer must at all times feel the greatest anxiety, but that anxiety was not at all oppressive, because he knew there was something in the atmosphere of Guy's Hospital that brought everyone, from their Chairman to the youngest apprentice, into line for one common cause and one common good. He (Mr. Bonsor) had many employments, he had anxieties and cares, but he came to Guy's for his relief. The work he did there had a special charm, because he knew he was working midst a united family, because he knew that those whom he now addressed were good enough to think that those in authority were doing their best to advance the prosperity of Guy's.

The next toast was that of "Guy's Hospital Medical and Dental Schools." Mr. Wells, in proposing this, showed that the health of approximately more than two million of the population of Great Britain was in the guardianship of men who had received education in Guy's Hospital Medical School; and, as they knew, not only was this influence exercised at home, but in every part of the globe. He referred to the great work which Drs. Perry and Shaw had done for the Medical School in the present generation, and in conclusion paid a tribute to the gentleman to whom the existence of that annual dinner was largely due—Mr. Croucher. On a great and memorable occasion they had been told by a high authority that in the whole range of history there were only two persons by the name of "Samuel" who had ever done anything—the Prophet Samuel, and Samuel Johnson. Guy's Hospital Medical School was making history very fast, for at the present moment it possessed two Samuels, namely, Sir Samuel Wilks and Mr. Samuel Croucher.

Dr. Shaw, in response, said he found it difficult to say anything very new on the subject, for so many of his ideas had been already so well expressed by previous speakers. He was very glad that by a mistake in the programme, the Hospital had been coupled with the Medical School in the toast, for they were all one; neither could exist without the other. He thought the present occasion was a proof of the good feeling which existed between those working on the two sides, and he felt sure that they were all imbued with the consciousness of the good work in which each man took his share.

Mr. Croucher also said a few words in response to Mr. Wells' reference to him.

The final toast of "The Visitors" was proposed by Mr. P. Mills and responded to by Mr. W. R. Millar.

An excellent programme was provided, and was carried on between the speeches. Songs were contributed by Messrs. Claxton, McD. Parrott, G. O'Hagan, Mason, Lyons and Gouge; violin solos by Messrs. Soper and Hartland; and recitations by Messrs. W. Churcher, J. E. Collins and T. Loates. Mr. Rowlett performed the task of accompanist.

From the Gazette's Special Pathologist.

NOTICES.

H., Ramsgate.—Microscopical examination of the centrifugalised deposit. This contains a considerable amount of vesical epithelium, a slight excess of leucocytes, together with calcium oxalate and uric acid crystals. No casts could be found.

H., Ramsgate.—Microscopical examination of the centrifugalised deposit. Of this there is only a small quantity, which consists almost entirely of large squamous epithelial cells. No blood discs, casts or renal epithelial cells were found.

H., Ramsgate.—No tubercle bacilli were found in this sputum, which appears to be of bucco-pharyngeal origin.

H. W. P., Hull.—The tubercle bacillus was not found in this sputum.

PATHOLOGIST.

Metropolitan Asylums Board.

INSTRUCTION IN FEVERS.
Commencing May, 1901.

A course of instruction in the diagnosis and treatment of fevers will be held at each of the undermentioned hospitals on Tuesdays and Fridays (except at the South-Eastern, Eastern, and Brook Hospitals) at the times stated below.

Eastern Hospital, The Grove, Homerton, N.E., at 1.30 p.m. E. W. Goodall, M.D., Medical Superintendent. (N.B.—The class at this hospital will be held on Mondays and Thursdays, beginning 6th May.)

*North-Western Hospital, Lawn Road, Hampstead, N.W., at 2 p.m., beginning 7th May. W. Gayton, M.D., Medical Superintendent.

*Western Hospital, Seagrave Road, Fulham, S.W., at 2 p.m., beginning 7th May. R. M. Bruce, M.R.C.S., Medical Superintendent.

*South-Western Hospital, Landor Road, Stockwell, S.W., at 2 p.m., beginning 7th May. F. Foord Caiger, M.D., Medical Superintendent.

Fountain Hospital, Tooting Grove, Tooting Graveney, S.W., at 2 p.m., beginning 3rd May. C. E. Matthews, M.D., Medical Superintendent.

Grove Hospital, Tooting Grove, Tooting Graveney, S.W., at 2.30 p.m., beginning 3rd May. J. E. Beggs, M.D., Medical Superintendent.

South-Eastern Hospital, Avonley Road, New Cross, S.E., at 1.30 p.m. F. M. Turner, M.D., Medical Superintendent. (N.B.—The class at this hospital will be held on Mondays, Wednesdays, and Fridays, beginning 29th April.)

Park Hospital, Hither Green, S.E., at 2 p.m., beginning 3rd May. R. A. Birdwood, M.D., Medical Superintendent.

Brook Hospital, Shooters Hill, Kent, at 2.30 p.m. J. MacCombie, M.D., Medical Superintendent. (N.B.—The class at this hospital will be held on Mondays and Thursdays, beginning 6th May.)

*The class at this hospital is now full.

The next course will commence in October, 1901.

N.B.—Students desiring to attend a course of instruction must, *before* attending at the hospital, bring (between 11 a.m. and 4 p.m., Saturdays 11 a.m. and 12 noon) or *send by post* to the Clerk to the Metropolitan Asylums Board, Embankment, E.C.—

(1) Authority from the Dean of the Medical School.

(2) Fee—£3 3s. for 2 months' course, or £4 4s. for 3 months' course. Cheques to be made payable to "The Metropolitan Asylums Board."

The Student must *definitely* ascertain *before* taking out his course whether he requires a 2 or a 3 months' course. In the event of his taking out a 3 months' course, the extra £1 1s. will not, under any circumstances, be refunded to him.

(3) Full Name and Address, and name of Medical School. (N.B.—The name must be in full, and must be distinctly written.)

(4) The names of two or more of the above hospitals, arranged in the order in which the Student would prefer to attend, in case the classes at any of the hospitals should be already full. At least two names should always be given.

(By Order),
T. DUNCOMBE MANN,
Clerk to the Board.

9th March, 1901.

Appointments.

MEDICAL SCHOOL APPOINTMENTS.

The following appointments have been made by the Medical Council and approved by the House Committee:—

Clinical Assistants.—Messrs. D. L. Morgan, S. J. Ormond, J. F. Robinson, J. A. Andrews, E. C. Bevers, E. F. G. Heap.

Clinical Assistants in Medical Out-Patients.—Messrs. T. T. Kelly (Dr. Washbourn); E. J. F. Hardenberg (Dr. Bryant).

Obstetric Dressers.—Messrs. A. C. Lewis, G. H. H. Manfield, F. E. Welchman, M. Coplans (April 1st); F. A. Beattie, D. H. Trail, F. C. Wetherell, H. W. Brown (May 16th).

Dressers in the Throat Department.—Messrs. G. T. Collins, G. Evans, W. J. Davies, R. P. Marshall, R. S. Roper, W. M. Robson.

Assistant Surgeons' Dressers.—Messrs. G. S. Robertson, C. M. L. Cowper, A. P. Piggot, B. I. Rahim, J. Goss (Mr. Symonds); J. B. Copland, H. L. Shelton, G. W. Smith, B. Glendining, C. M. Murray (Mr. Lane); H. R. Grellet, W. E. J. Tuohy, C. H. Denyer, S. L. Pallant, E. H. Griffin (Mr. Fripp); K. Anderson, C. H. Robertson, H. Tipping, W. L. M. Day, L. H. Moiser (Mr. Dunn).

Medical Ward Clerks.—Messrs. B. B. Westlake, F. W. Fawssett, C. M. Anthony, W. F. Box, E. G. Goldie, H. M. Goldstein, P. W. Hamond, H. S. Jones, E. N. Jupp, E. W. Strange, W. W. Read, B. H. Wedd, R. G. Anderson, P. C. V. Bent, G. L. Buckeridge, C. F. Fraser, L. S. H. Glanville, J. M. Bickerton, J. H. Donnell, F. C. Robinson, A. R. Brailey, H. C. Winckworth, H. Ackroyd, J. S. Cooper, E. J. Gaffney, D. R. Pike, C. R. Shattock, H. S. Brown, H. B. German, F. C. R. M. Knight, T. C. Lucas, H. Johnson, H. E. Morris, A. R. Wilson, H. M. Woodward, G. F. Hardy.

Assistant Physicians' Clerks.—Messrs. C. H. Bubb, J. Braithwaite (Dr. Shaw); C. E. Adams (Dr. Washbourn); W. H. Bush, C. H. Dawe (Dr. Bryant); R. E. Brayne (Dr. Fawcett).

Surgical Ward Clerks.—Messrs. J. Bromley, M. B. Taylor, H. W. Bethell, C. H. Reinhold, H. D. Smart, H. Watts, F. H. Wallace.

Dental Surgeons' Dressers.—Messrs. C. H. Glenn (April—May); F. W. Sime (May—June); C. Tessier (June—July).

Aural Surgeon's Dressers.—Messrs. W. G. Stewart, R. C. Lawry, G. S. Graham-Smith (May—June).

Passim.

The last fortnight has been made memorable in the Hospital Rugby football world by the crushing defeat of the representatives of St. George's and St. Bartholomew's. On Tuesday, the twelfth, a crowd, quite up to the numbers of a final tie, assembled at the Richmond Ground to witness the semi-final against Bart.'s, and even our opponents' supporters could, I feel sure, hardly have wished for a better game. When the teams first appeared, one felt the horrible, well-known, inward sinking and, for a moment, faith in our forwards, who appeared to be giving quite a stone per man, wavered; but from the moment the ball was in motion, one realised that we were witnessing a contest of weight and strength *versus* skill. Although at half-time the scoring sheet was still clean, we felt that only bad luck or the tremendous exertions of the Bart.'s men had prevented us from adding more than once to our score. That our predictions were correct, was well manifested before the end of the game, when our team left the field the winners by nineteen points. No one who watched the game will deny that we deserved to win, and that if our team is in the same form on Monday when we meet London in the final, they will not fail to give an excellent account of themselves.

Not a single man played badly, and where all were so good it is almost absurd to mention any one specially. Harrison, at back, gave an exhibition that will long be remembered—no mistakes, always safe, always strong. Of the other outsides, Louisson, O'Brien and Orpen were all at their very best, and Morgan, although always marked, played as we now expect him to do. The forwards played hard and with much commendable dash, and should not now fear any pack. Cutler and Wall, who scored a clever try, were the pick.

We feel sure that the Staff, Sisters, Nurses and Students, all who can, will turn up on Monday, and help by their presence our representatives in their last struggle for the little ivy-covered cup, which, if the gods be with us, and Guy's is its old self, will have many wanderings before it is put to rest in the smoking-room.

Sympathisers of the Association team will no doubt expect something in the way of an epitaph concerning Monday's match. It was certainly in great measure due to their poor display that they lost the Cup, but we can congratulate them on a most excellent season's record, and sympathise with them in thus marring, at the eleventh hour, an otherwise exceptionally good season.

We note with much pleasure that Mr. Fripp has been appointed Knight of Grace to the Order of the Hospital of St. John of Jerusalem in England, in recognition of his services in South Africa. We offer him our best congratulations. Mr. Treves also shares a like distinction.

In our last issue we announced the fact that Mr. Arthur Moon, who has been a prisoner with the Boers at Pietersburg, had been released. According to a letter, dated February 1st, from an *Evening News* correspondent at Pretoria, published on March 4th, Mr. H. Cradock Fry is also once more safely among friends. It will doubtless be remembered by some that Fry went out as surgeon to the 49th Imperial Yeomanry Company, with Moon as his assistant. According to this correspondent, they were taken prisoners together at Warm Baths, and were removed to Pietersburg, where they remained five months. Fry was at first lodged in the same gaol as a number of native convicts, but owing to the gratitude of the landdrost, whom he pulled through an attack of fever, he was liberated on parole, and afterwards enjoyed comparative freedom.

We regret deeply to announce the death of William McIlroy, son of Major McIlroy, Royal Artillery, while on a voyage to Australia on account of ill-health. He entered Guy's in October, 1892. He was never robust in health, and was more than once compelled to relinquish his studies for a time on account of a temporary breakdown. In October, 1899, he passed his

Midwifery at the College, but soon afterwards symptoms of phthisis developed, and he was advised to take a sea voyage. He set out for Australia on the ss. "Britannia," and at Marseilles received the news of his father's death. He rapidly got worse, and died while passing through the Red Sea on February 8th.

The annual general meeting of the Students' Club will be held in the Anatomical Theatre next Tuesday, March 19th, at 4 p.m. Dr. Pye-Smith has kindly promised to take the chair, and Dr. Hale White, the treasurer, will also be present. The business of the meeting is to elect three representatives of the non-resident members of the club. It is hoped that men will show their personal interest in the affairs of the club by turning up in good force.

The new Isolation Ward is now in full working swing, or at least is in readiness for such. One sister, a day and a night nurse, and a few pieces of furniture are all ready and waiting, but at present their usefulness is extravagantly employed in the service of one poor little infant, who certainly has every appearance of being very much isolated. Doubtless, however, things will not remain so long. The ward is quite an interesting little habitation, with accommodation for six or eight beds, a sister's apartment and a general room, together with innumerable doors of every pattern and construction, leading to—well, we don't quite know where, for we heard rumours of nurses' accommodation, and consequently refrained from a too searching investigation. The old Isolation Ward is in process of reconstruction, and is, we believe, to be devoted to tracheotomy cases, so that such cases will no longer find admittance into the general wards, and the attendant risks of infection will be obviated.

On the date of issue of this number will be held the annual ladies' night of the Debating Society, as already announced. Dr. Pavy has kindly consented to take the chair. The debate will take place in the Court Room, and will commence at 8 p.m., when Mr. Wacher will move, "That in the opinion of this House the influence of women is essential to man's success." Those who have already heard Mr. Wacher on previous occasions, will certainly not miss hearing him again. We feel sure that he will surpass himself in eloquence in championing the cause of the ladies, and will at the same time offer an amusing gymnastic display of facial and brachial contortions. Mr. Gibson has perhaps undertaken a more difficult task in opposing the motion, but he will be moved by the force of self-conviction, and his stolid straightforward power of address will prove equally attractive. With two such leaders a very interesting debate should be in store for us, and we hope men will turn up in good numbers and support them, accompanied by their friends of the fairer sex to grace the assembly.

The dinner of the Officers and Servants of Guy's Hospital, which took place on Monday, the 4th inst., at the Bridge House Hotel, was a most successful affair. There are probably few assemblies of men in which one finds representatives of so many professions and trades, from the mender of men to the mender of gaspipes, and from the layer-up of money to the layer of bricks and mortar, but this by no means detracts from its geniality. Good victuals and drink, good speeches, an amusing entertainment of song and recitation, and good fellowship, all contributed to make everyone pleased with himself and everyone else.

We are asked to again draw attention to the fact that the postponed annual dinner of the Dental Society is to take place on Saturday next, 23rd inst., at the Hotel Cecil.

In the February issue of the London Hospital Gazette appears an amusing paper read before the Medical Society of the hospital by Mr. Mansell-Moullin, entitled "The Origin and Development of the Medical Woman." The attempt is made to approach the subject in a "strictly scientific and impersonal manner." The medical woman is accordingly described as a "new variety of medical organism," and later as a "sport" (in a technical sense of the term). This "sport" had made its appearance at several

periods in the world's history, and died out again because it was not suited to its surroundings, but these surroundings and conditions had changed, and on its reappearance in the last century it had grown and flourished—such is the line of argument. Mr. Mansell-Moullin is of opinion that the development of this sport should be encouraged rather than ignored, for "the man who is wise accepts with a good grace what he cannot prevent, and makes the best of it." He accordingly applauds the action of the Edinburgh Obstetric Society in admitting women as members, and advocates their admission to other societies of a like nature. This all sounds very liberal-minded and just, but as was naturally urged, "it is not convenient or comfortable to talk about certain things in the presence of ladies." By all means let them have every opportunity of obtaining the coveted qualification of a lady doctor, but let them form their own obstetric or pathological societies!

On being asked casually the other day for a definition of the term General Pathology, the reply was promptly given, "The science of disease;" but we understand that at a meeting of a certain learned association this definition was seriously disputed. An endeavour was made to limit the connotation of "general pathology" to the pathological processes underlying certain general diseases. It would certainly appear to us that the term general pathology should embrace the study of all diseases, local or general, taking into account not only the underlying physiological processes and the anatomical changes in the tissues, but also the conditions and causes of disease, and in this way embrace the whole study of bacteriology. In fact, one may regard it as a generalisation for the study of all diseases—medical or surgical, to the exclusion only of treatment—and even this province it may rightly encroach upon, when the rationale is physiological; when one is combatting one physiological process by another, as, for instance, in serum therapy. Such a discussion on the definition of terms is regarded by some as exceedingly futile, but it is desirable to have some common concord on these matters, and it often leads to a clearer idea of things, and relations of things. We should be glad, therefore, to hear other views expressed on the point.

Nursing News.

Matron's Office.

On February 25th, the new Isolation Ward was opened, and Nurse M. B. Wood, (Head Nurse in Miriam Ward) was appointed Probationary Sister. Miss Wood entered the Hospital as a Probationer in August, 1897.

On March 7th, Nurse R. J. Hockley left the Hospital after nearly five and a half years' service, having been appointed Sister-in-charge of the Children's Ward at the Devon and Exeter Hospital. Probationer R. Johnson has been appointed to succeed Nurse Hockley as Head Nurse in Victoria Ward.

On March 9th, Nurse Grasett left the Hospital, having completed her three years' training, and Probationer Bible was appointed to succeed her as Head Nurse in Luke Ward.

On March 12th, Nurse L. Collins left the Hospital on completion of her three years' training, and Nurse Palmer was appointed to succeed her as Head Nurse in Bright Ward.

On March 13th, Nurse Orr, (Head Nurse in Bright Ward) left the Hospital on completion of her three years' training, and Probationer Hembling was appointed to succeed her as Head Nurse.

Papers by Guy's Men.

The Milroy Lectures on the Influence of the Dwelling upon Health. By John F. J. Sykes, M.D., D.Sc.—*Lancet*, 2nd and 9th March.

Four Cases in which pain was relieved by Suprarena Extract. By E. A. Peters, M.D., B.C. Cantab.—*Ibid.*, 2nd March.

The Campaign against Ague. By Herbert E. Durham F.R.C.S.—*British Medical Journal*, 2nd March.

Palatal Paralysis following Enteric Fever. By Frederick Taylor, M.D., F.R.C.P.—*Ibid.*

The Histology of the Urinary Tract in its relationship to Morbid Urinary Deposits. By G. Leslie Eastes, M.B., B.Sc. Illustrated.—*Ibid.*, 9th March.

Jaundice in Children. By George F. Still, M.A., M.D. M.R.C.P.—*The Clinical Journal*, 13th March.

Two Lectures on Immunity. By Walter C. C. Pakes.—*Ibid.*

The Collection and Examination of the Gases produced by Bacteria from certain media. By Walter C. Pakes and Walter H. Jollyman.—Trans. Chem. Soc 1901, Vol. 79.

The Bacterial Decomposition of Formic Acid into Carbon Dioxide and Hydrogen. By the same—*Ibid*

In Lighter Vein.

The following was discovered in the Gazette letter-box. It speaks for itself.—Ed.

The Universal Journalistic Controversy Providing Co., Ltd., To the Editor, G.H.G.

Dear Sir,—It has been decided, on the experience of several scurrilous rags, that the best way to increase the circulation of a paper is to publish a virulent attack on some noteworthy institute. The above Company, therefore, has been formed in order to provide material for such papers as will condescend to use this means of making themselves known.

We beg to enclose you the page from our catalogue which deals with matters medical, and would feel extremely grateful if you could suggest to us any additions, alterations or improvements.

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The Editor, G.H.G.

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In Quest of Gold.

(From our Special Correspondent in West Africa.)

Cape Coast Castle,
February, 1901.

When I wrote to you last I was under the impression that my next letter would be dispatched per runner from the bush. However, the motto which one Governor of the Gold Coast inscribed over the castle here, "Festina lente," appears to have permeated every branch and department of life, both public and civil, and as an effect of the remote cause I find myself still confined to the sea shore, with no immediate prospect of movement further afield. The shipping company which serves the West Coast of Africa, runs a series of so-called "fast" boats and various intermediate "slow" boats. The differentiation is purely conventional and there is no guarantee as regards speed with either. As a matter of fact, the fast boats are confoundedly slow, and the slow boats adjectival snails. We were landed here by one of the first category, and our stores were despatched—why I cannot tell—by one of the latter class of steamers. The consequence is that, although the goods left England on the 12th December, 1900, as yet there is no sign of the steamer. A part of our expedition has already started with a fortnight's stores, leaving me, with five other white men, to bring up the rear on the arrival of our transport. This will mean that I shall have a train of about two hundred carriers, of both sexes, each of whom carries on his or her head a load not exceeding sixty pounds in weight, and each of whom receives a shilling a day and threepence in lieu of food. The white section of the party travels in hammocks, borne on the heads of four hammock men, who draw a little extra allowance, as their labour partakes somewhat of the skilled variety. The party makes from ten to twenty miles a day, along a bush track, in places opening out to four or five feet, and again narrowing to a mere bridle path.

The amount of labour expended over such a villainous road—expended, I mean, in transport, not in maintenance, is simply enormous; but as yet the various railways, notably the Government line from Sekondi to Kumasi, are making little progress, and it will be years before the white man rolls up to the gold-fields in a first smoker. Perhaps you imagine that this method of travelling at present, slung in an easy, shady hammock,

is little short of the ideal. When, however, the novice finds out that hammocking produces sea-sickness, and that a double bank of hammock-men will only carry him for half a day, and that he must tramp the rest, the gilt on the gingerbread undergoes a miraculous disappearance. Despite the fact that there is much gold in the country, both hidden in the earth and wrapped up in the possibilities for trade, one is convinced that this is no country for a white man. The black, with his tough hide, his sun-proof pate, and his simple wants, can live and die happily in West Africa. He knows nothing better, and under the thin veneer of civilization, spread with consummate care by the missionaries—the poor, hard-working, misguided missionaries—he remains at heart a savage, and an animal as much the inferior of the white man—even the "mean-white," from Greece and Portugal—as the ourang-outang is inferior to him. The question which has given place almost to an axiom, the "man and brother" theory, is utterly and absolutely fallacious, and the sooner the real, the indisputable, inferiority of the black to the white is recognised, the better it will be for both races. There are many who are educated men in this town—men who can quote, or misquote, Shakespeare with a happy felicity—men who have known English universities and the English Bar; there are men ordained in the English Church, and men who are treasured adjuncts of the Nonconformist religions, yet in nowise do they alter the broad statement that the black man is a savage, education or no education, and any traveller will tell you of the naked chiefs, who live in squalid magnificence in the bush, who have known Balliol and walked on the banks of the Isis. Look around here, where English influence should have the greatest weight! Where are the boasted English sanitation, the permanent water-supply, the improved roads, and the ameliorated social conditions? It is surely a disgrace to us, as a nation, that we should allow a principal town in one of our colonies—a settlement with a native population alone of ten thousand—to remain in the filthy condition, socially and morally, in which Cape Coast Castle now stands. Native surface wells supply the water, and native sheep and goats, with the situation-saving vulture, remove the excrement and offal, to a certain extent; but their limits are rendered painfully obvious to the white man's nostril and the white man's eye. There has been yellow fever in the past, and there will be yellow fever in the future, and God knows why there is not yellow fever in the present. And this in the dry season, when the heavy rains are not present to turn each road into a muddy ditch, and each house into a cesspool.

The love of finery, in ourselves, the last link with our forgotten savage ancestry, remains in the Fanti in its primeval strength. "Dash" your boy, a mauve shirt, and a red pair of pants, and he is proud beyond compare. He may perhaps, thanks to the Wesleyan and government schools, be able to read from a board school primer with a show of intelligent interest. He may even be able to give an approximate total to a row of figures, but the reader and the arithmetic are thrown aside and the eager hand extended to grasp the gaudy raiment. "Is he not a man and a brother?" No man is he, but a child, in all save physical strength, and no brother to the northern white races. The white man is master; he recognises it and asks nothing better, and if the white man would break down the bar of long years of civilization and meet him as a brother, the result is simply a revulsion of feeling and a blatant assumption of superiority on the part of the black.

To-day, the Mahommedan "Christmas," we heard the sad news which you in England had been doubtless anticipating, and with a laconic Reuter telegram and the Union Jack at half-mast, we tried to realize that the dear old Queen was dead. Every government office and every store at once closed, and the people poured out into the streets to express in their own fashion their feelings at the white man's loss. Meanwhile the Mahommedan population prepared, with much burning of powder, for the celebration of their festival. As the starting point of the procession lay a couple of hundred yards up the road in which our hotel lies, I was able to get several photographs of the curious business which serves as a religious ceremony. In the early morning I had noticed the unwonted cleanliness of the white gowns which the followers of the prophet wear in contradistinction to the Christian Fantee, and when the procession started on its way, the reason of this luxury became apparent, for every Arab strove to excel his brother in the majesty of his apparel. Chief interest centred round the priest, who was almost hidden under a large wicker hat, and who was dragged along in a go-cart. Preceding his holy person was a motley assembly of musicians and dancers, chiefly female, who made weird noises on various homely utensils, and made up for an extreme lack of musical skill by an equally extreme earnestness. Then came a holy man, a comic holy man; in fact a veritable reverend Dan Leno, who made strange noises with his nose, and screwed his face into wonderful shapes. At the suggestion of three pence he repeated his performance in slow time while I kodaked him in detail. Then the procession passed on to hold what appeared to be a revivalist meeting at a mud hut further down town. A couple of hours later the Fantee population was out on holiday. Every goat, sheep, or fowl, that could be chased, was run down and killed, and soon the streets contained surging mobs of people fighting over the remains of some wretched little hen. Apparently, on any day of national importance the rules of proprietorship are suspended and private goods become public property. For our part we helped in the general enjoyment by carefully selected and delivered oranges from the balcony of the hotel. Hurled with all the strength at one's command, an over-ripe orange becomes a lethal weapon, and we found that with a small number of these missiles we could keep the hotel compound free of intruders. The final stage of the proceedings saw the District Commissioner with a police posse, and the head men were then severely rebuked and bound over to keep the peace. Their conduct was censured,

the reason of the holiday impressed upon them, and then the town left to simmer into quiet.

A few days back the dressers of the Ashanti Field Force passed through here on their way to Gambia, where further trouble is brewing and for which service they have volunteered. Among their number was Fowke, an old Guy's man, who left after doing his second conjoint and put in some years in Australia. Love of adventure brought him out to Africa, and although I had never known him at Guy's, our meeting was none the less cordial, and we made merry together. The Government has hardly acted in a straightforward way with regard to the dressers. They were sent out from London with a first class passage, and the understanding that they would mess and rank with officers. When at Kumasi, however, they found the position assigned to them was that of N.C.O.'s, and that they were actually to rank junior to the white serjeants. They protested, but in vain, and the satisfaction of going one better lay with the War Office. The dressers left Cape Coast for Sierra Leone by the s.s. *Loanda*, and the last thing I heard, on bidding them farewell, was that second class passages only had been provided them. The difference in comfort and prestige which exists between the two classes is simply enormous, and no one who respected himself and his comfort would travel other than first on this line. Accordingly, the dressers paid the difference themselves and—resigned! Unless stopped by cable at Sierra Leone, by a promise of first class provision and an apology, they will continue by the steamer to England and cast off the dust of these shores in the face of a perfidious and penurious bureaucracy. Fowke picked up, outside Kumasi, a human skull, presumably of an adult male, but bearing a persistent frontal commissure, and an additional commissure running parallel to the occipito-parietal and uniting the anterior and posterior portions of the occipital bone. He intends presenting this specimen to the Guy's Hospital Museum.

I can give you nothing of medical interest. Thanks to a steady course of quinine, a judicious use of aperients, and a firm hand on the liquor bill, which has to be countersigned by me, our party remains disgustingly healthy, but still *absit omen* lest in the future I have to sing a different song. The weather here is less trying than when we first landed. Possibly we have become a little used to our surroundings and have insensibly modified our actions to suit the contingencies. Anyhow, barring occasional mosquito bites and continuous sand fly bites, prickly heat is our only enemy. This skin disease is simply an extended sweat rash, and in my own case is of very little moment. Minute papules changing by some infective process to pustules, occasionally leave a raw surface the size of a pin's head, but continual tubbing prevents any spread of an impetigenous nature, and the lesion heals readily. The climate modifies our hours here, and with early breakfast at seven, one is quite ready to turn in about 9.30 in the evening and sleep round till daybreak the next morning.

Davies-Colley Memorial Fund.

A general meeting of the subscribers to the above fund was held at the hospital on March 12th, at 4 p.m. Dr. Taylor, in the chair, described the form of memorial which the committee, after much deliberation, had decided to suggest. The committee's suggestion was that the money subscribed should be invested, and that the interest therefrom should be used annually to add books to the hospital library; these books to be suitably bound and to carry a book-plate of a commemorative nature. The chairman pointed out that there are many books which, as works of reference, are of great value, but which the hospital does not always see its way to procure. Some of these, acquired annually by the Memorial Fund, in the course of years will make an imposing collection, and it was felt that there could be no better way of perpetuating the memory of Mr. Davies-Colley. The majority of letters received from subscribers were in favour of the scheme, and after some discussion the scheme was unanimously adopted by those present. The present committee was re-elected to work out the details of the memorial, and were empowered to invest the money received. The total amount received was £402.

THOS. A. STEVENS, Hon. Sec.

South African Memorial Fund.

(This Fund has for its object the erection of some permanent Memorial in the Hospital to those Guy's men who have fallen in South Africa.)

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Notice.

The Director-General of the Army Medical Service has informed the Dean that there are several vacancies for Civil Surgeons in South Africa. A form of contract may be seen in the Dean's Office.

March 11th, 1901.

Reviews.

The price of books submitted for review should in every case be stated.

Hygiene and Public Health. By Louis Parkes, M.D., D.P.H., and Henry Kenwood, M.B., D.P.H., with illustrations. London: H. K. Lewis, 1901. Crown 8vo, pp. 732. Price 12s.

It would be quite wrong to call this a sixth edition of "The Hygiene and Public Health" originally written by Dr. Parkes, because it has been practically re-written, and very many improvements have been made.

Perhaps the best part of the book, and that which will appeal to those who are reading for a diploma in Public Health, is Chapter XII.—Sanitary Law and Administration. This is really a model of conciseness and clearness, and any candidate who knows this chapter will have a very fair knowledge of the intricacies of the law as applied to Public Health.

The part that we like least is the first part of Chapter IX.—The Contagia. Several of the errors to which we alluded when speaking of the last edition of the book by Dr. Parkes have been transferred to this volume, and the account is somewhat meagre.

All the parts dealing with administrative work are excellent, and the chapter dealing with the disposal of sewage is intelligible and sound.

Taken as a whole, we consider that this is certainly one of the best of the smaller books upon the subject, and one which will enjoy a deservedly large circulation.

Malaria. By Professor Angelo Celli, Director of the Institute of Hygiene, University of Rome. Translated from the Italian by J. J. Eyre, M.R.C.P.

The second edition of this excellent work brings up our knowledge of Malaria to the beginning of 1900. It consists of two parts, Part I. dealing with the epidermiology. Part II. with the prophylaxis of the disease.

In his account of the biology of malaria, Professor Celli goes into the malaria of the batrachians, birds, and mammalia, showing the universality of endocorpuscular parasiticism throughout the animal kingdom.

Surgeon Major Ross's important work on avian malaria, tracing the life-history of the parasite of avian malaria in the mosquito culex pipieus, is fully entered into.

A clear and concise account of the parasites, with excellent diagrams, of quartan, tertian, and malignant fevers, with their destructive features is then given. As regards the existence of male and female crescent forms of the plasmodium malariæ and the process of fertilization in the midgut of the mosquito, Professor Celli is clear. Finally, an account of the life-history of the parasite of human malaria in the mosquito anopheles claviger, as worked out by Grassi and others, following the lines laid down by Ross in his work upon the parasite of avian malaria in the mosquito culex pipieus, is given.

The next section on the sources of malarial infection proves how the presence of both man and the mosquito is necessary for the reproduction of malaria. The genus culex, harmless as far as man is concerned, and the genus anopheles which is injurious to man, are then treated from a biological stand-point, their special features and differences being illustrated by telling photographs and diagrams.

Water is proved to be instrumental in the spread of malaria, merely because it aids the propagation of the mosquito. Celli caused some sixty persons to drink 2—3 litres a day of marshy water from intensely malarious districts—not one of these developed malaria.

An account of Grossi's successful experiments in transmitting spring, tertian, and æstivo-autumnal fevers, by means of the bite of the mosquito is given. But these experiments are open to the objection that they were carried out in a country which is malarious. Since the publication of this book, Dr. Manson, in England, has reproduced malaria in healthy men by means of the bite of mosquitos infected with malaria in Rome, and transported to London, where the experiments took place.

Professor Celli's researches after an agent which might immunise man against malaria are well conceived, and certainly the injection of euchinin and methylene blue subcutaneously seems hopeful. By means of subcutaneous injections of these substances he rendered patients immune to an injection of two grammes of blood from a person suffering with æstivo-autumnal fever. This subject requires further investigation.

The relations between agriculture and malaria are fully dealt with. The rice-field is strongly condemned. Professor Celli looks upon the extension of this form of agriculture in malarious districts as most reprehensible.

In Part II., dealing with the prophylaxis of the disease, the isolation of cases of malaria is shown to be one method of extirpating the disease; but this procedure is hardly practicable yet.

Quinine and its action on the parasite is carefully discussed. A large number of culicidal substances have been tried by Professor Celli; on the whole they are unsatisfactory.

Doubtless the certain method of preventing malaria is to prevent the mosquito biting. In 1900 Dr. Manson sent healthy men to live in the Roman Campagna, where nearly everyone was a malarial cachectic, and where all visitors became prostrated with the disease. These persons took no quinine, their only protection against fever being the mosquito net, consequently they were not bitten by mosquitos, and enjoyed perfect health during their residence of several months in this excessively malarious district.

As regards the immunising action of drugs, interesting figures are given. Arsenic and quinine are hopeful. In the case of arsenical prophylaxis, an experiment conducted on 78 railway employées at Bovino Station—a most malarious spot—is instructive; 39 of these were treated with arsenic—three of these had mild fevers;

the remaining 39 were not treated with arsenic, and all of these contracted fever.

The local predisposing causes of malaria, such as the level of the surface-water, lakes, marshes, etc., and the means by which they may be controlled, are fully described.

Professor Celli's book is a most interesting philosophic treatise of his subject. The enormous amount of labour he has done and the important results he has arrived at will doubtless stimulate many to follow up and elucidate still further the subject.

The book loses somewhat in the translation; in parts it is rather difficult to follow, but on the whole it is clear. The illustrations, maps and tables illustrating the text are excellent.

Guy's Hospital Debating Society.

A meeting of the above society was held on Saturday, the 16th February, being the fourth meeting of the session.

Dr. FAWCETT took the chair, and after the reading of the minutes by the Secretary, Mr. WYLIE was called upon to move "That the present deplorable position of British influence in China is, in the main, due to the meddling interference of British pioneers with Chinese prejudices."

In supporting the motion, Mr. WYLIE first proceeded to show that the position of British influence in China is deplorable, and in doing so he referred to Lord Charles Beresford's report on his return from his commercial mission in 1898, in which he said, "From my conversation with Chinese authorities, as well as British in Pekin, an opinion was distinctly formed in my mind that British prestige is below that of Russian." The fact that Britain had failed to support Japan when ordered out of Shantung and Korea by the Russians, the interference of Russia in the proposed British loan to China after the Japanese war; the Talienwan and the Port Arthur incident; the fortification of Port Arthur compared with that of Wei Hai Wei; the presence of 120,000 Russians in East Siberia and Manchuria, all tended to enhance the power of the Russians and belittle that of Great Britain in the eyes of the Chinese. He then proceeded to trace the history of our commercial and religious relations with China, which dated from the cessation of privileges of the East India Company a little before the Queen's accession, and showed that their susceptibilities and prejudices had not only been neglected, but grossly trampled upon, so as at one time to call forth a vote of censure on the then acting consuls from the Home Government. Reference was then made to the opium trade and the way in which it had been forced upon the nation by the unscrupulous British traders. The work of the missionaries was also to be deplored, they caused dissension and dissatisfaction, and poisoned the mind of the Chinaman against the foreigner. The converts were a continual thorn in the flesh of their neighbours by their desertion of the national cult, by renouncing their cast and nationality, and in refusing to pay tax for the festivals of their native religion. Missionaries further exasperated the natives by demanding to be carried in state in green chairs, and by abrogating the temporal power of the Mandarin and Governor.

Mr. D. P. WATSON, in opposing the motion, said that the word influence might be taken in two senses; either as meaning the power to extort concessions, or, in a wider sense, social, moral, intellectual, in fact, civilising influence. In neither case could the lack of influence be justly ascribed to the meddling of pioneers. Taken in the first sense, the lack of influence was clearly due to the vacillating policy of the Home Government, which had committed a series of blunders, the chief of which, perhaps, was their acquiescence in the usurpation of the throne by the Dowager Empress with her strong anti-foreign proclivities. As regarded the lack of civilising influence, this was due to a more far-reaching cause than the meddling of pioneers, namely, to the gulf fixed between the Asiatic and European in thoughts, aspirations and conclusions. Our empires in India and Africa had been quoted as showing that it should be possible for us to exercise an equal influence on China; but the comparison was unjust. The case of Africa was different, because the negro possessed the broad sense of the superiority of the white man, which was utterly lacking in the Asiatic; indeed, was replaced by the feeling of contempt. While in India we found a number of hostile races, each preferring that we should rule, rather than another of themselves. Moreover, should a second and more successful mutiny occur, it would probably be found we had left behind no more real influence than the Romans have left in this country; some good roads, some useless buildings, and some deterioration of the native races. The fact that vengeance had been specially wreaked on the missionaries in China was simply because they were the most unprotected class of foreign devils, and therefore acted as scapegoats.

Mr. GIBSON, in supporting Mr. Wylie, maintained that Mr. Watson had actually proved the truth of the motion throughout his speech, and especially by his attack on the policy of the Government.

Mr. GRIFFIN wished to alter the wording of the motion, and accordingly moved an amendment to the effect that the words "British pioneers" be substituted by "missionaries," and he supported the amendment by a vigorous onslaught on the evil work of the missionaries.

The amendment was seconded by Mr. TUOHY.

Mr. STAMM, in opposing the motion, contended that Mr. Watson's distinction between the policy of the Government and the work of British traders and missionaries, was a just one, and in assigning the present low ebb of British influence in China to the former, he was refuting absolutely the motion before the House.

Mr. BRYDONE lent his weighty support to the opposition.

Mr. LEWIS contended that if it were only for the emancipation of Chinese women, misssionaries and

others were justified in their work of meddling interference.

Mr. Ormond made an eloquent defence of the missionaries and their work, and greatly regretted the amendment before the House.

The amendment was then withdrawn.

Messrs. Simpson, Pakes and Coplans also took part in the debate.

The motion was eventually lost by 1 vote.

For the motion	...	...	14
Against ...	...	...	15
		Majority ...	1

The Twentieth Century New Testament

This is a most fascinating book. It consists of a translation of "The Apostle Paul's letters to the Churches" in pure modern English. "Do not conform to the fashion of the age, but let your lives be transformed by your new attitude of mind"; this is an instance. Good English, clear, vigorous, punctuated. Our own experience of the Pauline letters has hitherto been one of confusion and boredom. It seemed, for instance, in the old version of the letter to Rome, as if the Apostle were wandering round a very hazy argument in a circle. It now for the first time strikes us that this very letter is a wonderfully strong bit of reasoning. We read it as we would a leading article in the *Times*, balance its arguments, reject these, adopt those, and feel compelled to read it to the end, regardless of chapters.

The whole book is adapted to the modern reader. It is small and handy, in a light flexible cloth cover. Each of Paul's letters is prefaced by an account in a few lines of the circumstances under which it was written, and is divided up into paragraphs with appropriate headings.

We strongly recommend its perusal to all interested either religiously or scientifically in the truths of Christianity. F.

Pass List.

The Conjoint Board in England.

EXAMINATION FOR THE DIPLOMA IN PUBLIC HEALTH.

T. Halliwell, L.R.C.P. Lond., M.R.C.S. Eng.

A. H. Spicer, M.B., B.S. Lond., L.R.C.P., M.R.C.S. Eng.

University of Cambridge.

EXAMINATION FOR THE DEGREE OF DOCTOR IN MEDICINE.

A. J. Collis, M.B., B.C.

Sport.

Rugby Football.

GUY'S v. ST. GEORGE'S.

Inter-Hospital Rugby Cup.—Second Round.

(Guy's, 20 points; St. George's, nil).

This match was played at Richmond on Tuesday, 5th instant, in a gale of wind with occasional showers. George's won the toss, and, kicking-off with the wind, played with great vigour, Tucker, Pennington and Rutherford being prominent among their weighty front division. For about ten minutes they pressed, but our forwards defended obstinately, and Wetherell and Louisson were able to swamp the opposing pair of half-backs. Wetherell especially did yeoman service, and with a good run and punt into touch, relieved the pressure. Cutler kept his forwards well in hand, and their packing showed a great improvement on their previous performances; this enabled them to secure the ball in the scrum, and though Tucker headed one or two ugly rushes, good tackling by Glendining, Lawry and Wall prevented these from becoming dangerous. After having to touch down from a long kick, Morgan found touch in the George's twenty-five, and from a scrum, Wetherell got the ball away to Orpen, while a good round of passing between the latter, O'Brien and Morgan, enabled the latter to score a try, which was not improved. Guy's continued to play up strongly, and after our three-quarters had got in some good work, Orpen, following up his own punt, secured the ball and passed to Morgan, who grounded it behind the posts, being this time successful with the kick. A succession of tight scrums followed, in which George's had slightly the best of matters, but their backs were never dangerous, and Harrison, by good kicking into touch, saved his side much ground. Half-time found Guy's leading by a goal and a try.

On changing over, the assistance of the wind soon told, as the George's pack were not in as good condition as our own. They were quickly penned down on the line, and Louisson working the scrum in a clever fashion, set the three-quarter line in motion. The passing between Wetherell, O'Brien and Morgan was very good, and the last named was able to score twice in rapid succession, but neither of the kicks at goal were successful. George's were now a beaten side, and despite the efforts of Tucker, who came back from the scrum, they were unable to stem the tide, as, making few mistakes, our halves were well supported by their centres, and O'Brien and Orpen both secured tries, which, owing to the high wind, were not improved upon. Guy's finally won a good game by 1 goal, 5 tries (20 points) to nil. Teams:—

Guy's.—E. M. Harrison (back); E. Morgan, A. O'Brien, L. J. Orpen, S. P. Wadson (three-quarter backs); M. C. Wetherell, M. G. Louisson (half-backs); H. A. Cutler, T.

P. Thomas, R. C. Lawry, B. Glendining, A. R. Thompson, E. H. B. Milsom, R. G. Anderson and A. H. E. Wall (forwards).

St. George's.—J. C. Hall (back); L. D. Bailey, C. M. May, J. A. Torrens, W. J. Weston (three-quarter backs); R. K. G. Graves, C. H. Fagan (half-backs); W. E. Tucker, G. E. Orme, E. J. D. Taylor, D. Pennington, D. Brodid, J. E. Rutherford, C. A. Godson, A. H. Davis (forwards).

Referee: Mr. G. C. Lindsay.

Remarks.—The great feature of the game was the much improved packing and tackling of our forwards, Glendining, Thompson, Anderson and Lawry all showing improved form in this respect. Of the three-quarters, Morgan was the pick, playing a very pretty game, and completely nonplussing his opponents. Orpen and O'Brien were also good, but the former did not always handle his passes as cleanly as he might. Wadson showed great gameness, and fielded the ball well at times, but was slow in getting away, and did not exhibit the pace that one expects from him. Wetherell was excellent in the first half, but did not stay as well as Louisson, whose work at the scrum was very neat.

GUY'S v. ST. BARTHOLOMEW'S.

Inter-Hospital Rugby Cup.—Semi-Final Round.

(Guy's, 19 points; St. Bartholomew's, nil).

This cup-tie, played under the most favourable conditions of ground and weather, was witnessed by nearly 1,000 spectators, and was productive of one of the best games that have been played in the Rugby Cup competition for some years. Winning the toss, Cutler chose the Kew end of the ground, thus gaining some slight advantage of wind and slope, but having to face the sun. O'Brien returned the kick-off, finding touch, but the Bart.'s forwards, playing in a most determined fashion, took the game into our quarters; they had, for a time, rather the better of the scrums, and heeling out well, gave their backs some good openings, but the Guy's defence was sound, Wetherell and Louisson smothering the opposing halves time after time, while Harrison relieved with some good kicks into touch. After about ten minutes of tight play, Orpen picked up smartly and gained some ground, but was tackled before he could pass out to Morgan. Stone put in a useful run for Bart.'s, and transferred play to mid-field, but O'Brien found touch in our opponents' twenty-five, and after some loose play, Thomas dribbled on to their line, where Cutler marked, but his drop at goal was unsuccessful. Guy's continued the pressure, and from a penalty, O'Brien, with a fine drop, nearly kicked a goal. Harrison returned the drop-out, and following up well, tackled Marshall before he could get in his kick. Our forwards were now packing well, and, getting the ball away smartly, Louisson passed out well to Orpen, who unfortunately fell when on the point of scoring; while a few minutes later, another good bout of passing among the three-quarters was made unproductive by McEvedy failing to gather a rather difficult pass from O'Brien. Harrison made a mark on the far side of the ground, and O'Brien had a shot at goal, but failed. Thompson was penalised after the kick-out, and getting the ball from the scrum, Bart.'s three-quarter line got in some good work, which was neutralised by a pretty run by Morgan, who fell when looking dangerous. After some scrum work, Harrison kicked across the field, and Marshall taking the ball well, got away, but was tackled by Louisson, who was playing a fine game, but was temporarily laid out by an injury. Guy's again attacked strongly, but faulty passing once more prevented a score, and soon after Thomas was given off-side, and O'Neill, with a grand kick only missed placing a goal by inches, much to the disappointment of the Bart.'s crowd, and the evident exasperation of their linesman. Morgan found touch near the corner flag, and a certain try was again lost by a weak pass, half-time arriving without either side having scored, but Guy's going rather stronger than their opponents.

McEvedy and Morgan now exchanged positions on the wings, and from a fine bout of passing the latter almost scored. Louisson, getting well away between the scrum and the touch-line, centred with a judicious kick, from which O'Brien neatly picked up and transferred to Orpen, who drew first blood amidst great enthusiasm; Morgan having no difficulty in converting. After a few minutes, Louisson got the ball well away from the scrum and passed to McEvedy, the latter, making a good opening, enabled O'Brien to give a beautiful pass to Orpen, who dashed in between the posts, and Morgan again succeeded with the kick. Both forward and back divisions were now playing in an irresistible style, and Wetherell got the leather away cleanly to Orpen, while McEvedy put the finishing touch to a fine bit of play by a very strong run down the touch-line, fending off the opposing centre, and scoring a try on the extreme left, which Thomas could not improve. Though evidently disheartened, Bart.'s forwards played up vigorously, and Ash at half successfully prevented Morgan from scoring on more than one occasion. Their defence was weaker at the centre, and Orpen, again dashing through in fine style, scored on the left, but no goal resulted. Just before time, Wetherell dribbled the ball away from a loose scrum, and Wall picked up and fell over the line; the kick again failing. O'Brien tried to drop a goal, but a touch down only resulted, and from the drop-out Bart.'s invaded our lines with a good rush, to which Thomas responded with a magnificent dribble which left the game in the opposing twenty-five when time was called with Guy's winners by 2 goals, 3 tries (19 points) to nil. Teams:—

Guy's.—E. M. Harrison (back); E. Morgan, L. J. J. Orpen, A. O'Brien, P. F. McEvedy (three-quarter backs); M. C. Wetherell, M. G. Louisson (half-backs); H. A. Cutler, T. P. Thomas, R. C. Lawry, B. Glendining, A. R. Thompson, R. G. Anderson, E. H. B. Milsom, A. H. E. Wall (forwards).

St. Bartholomew's.—E. S. Marshall (back); D. M. Stone, G. Drury, N. M. Wilson, J. Corbin (three-quarter backs); B. N. Ash, W. H. Hamilton (half-backs); A.

O'Neill, L. R. Tosswill, H. T. Wilson, A. R. Neligan, G. H. Adam, H. E. Stanger-Leathes, R. Miller, J. Morris (forwards).

Referee: Mr. George Harnett.

Remarks.—The whole team is to be congratulated on a very good display against a strong side; though vigorous, the game was free from scrambling and wrangling, which so often mars a cup-tie, and was always interesting to watch. E. M. Harrison, at full back, was in very fine form, he took the ball well, and kicked with great judgment. Of the three-quarter line, Orpen and O'Brien were most prominent, though their passing in the first half was often open to criticism. Morgan was also good, taking the ball and kicking excellently, but was too well marked by Ash to be able to repeat his successes of the previous cup-tie. McEvedy was apparently hampered by the injury to his ankle, as, though running well in the straight, he could not do much of the dodgy work which is expected of him. Both halves were good, Louisson especially showing much pluck and judgment. After the first few minutes the forwards were good, packing, and heeling out well, and tackling very much better than they have done lately. A little more care in marking their men on the line out, and in getting round when their halves are overrun is still desirable. The whole team seems fit, and, if they do not underrate their opponents on Monday, may be expected to give a good account of themselves in the final round of the Rugby cup-ties.

GUY'S v. MARLBOROUGH NOMADS.

(Guy's, 11 points; Marlborough Nomads, 8 points).

Played at Surbiton on March 2nd. Lawry kicked-off for us against a very strong wind and glaring sun, and in spite of the fact that we were without Morgan, McEvedy, T. P. Thomas, M. C. Wetherell and French, we commenced to press, and from off-side against the Nomads, O'Brien had a drop at goal and apparently scored, although not given. Shortly after, we were penalised for off-side, and by an excellent shot the Nomads opened the scoring. Playing with such a strong wind the Nomads continued to press, but our forwards relieved well, and a good run resulted in Orpen scoring; the try not being converted. A mistake by one of our three-quarters shortly after, enabled one of the Nomads to get right away and race down the field, being caught just on the line by Wadson, not in time, however, to prevent a pass and a score between the posts, which was converted, leaving the score at half-time—Nomads, 1 goal, 1 penalty goal; Guy's, 1 try.

At the commencement of the second half the wind dropped slightly, and we had all the best of the game, Orpen scoring shortly after the re-start; O'Brien failing at goal. The Nomads never looked dangerous again, and we continued to press, Hicks making a splendid individual effort, running half the length of the field and scoring between the posts; Louisson converted. The remainder of the game was of a more even nature Although our backs missed several opportunities owing to faulty passing, we were left winners by 1 goal and 2 tries to 1 goal and 1 penalty goal. Team:—

Guy's.—E. M. Harrison (back); S. P. Wadson, L. J. J. Orpen, A. O'Brien, E. H. B. Milsom (three-quarter backs); M. G. Louisson, J. T. Hicks (half-backs); H. A. Cutler, A. H. E. Wall, R. C. Lawry, B. Glendining, R. G. Anderson, A. R. Thompson, M. A. Collins, M. D. Wood (forwards).

GUY'S 2nd XV. v. POLYTECHNIC.

(Guy's, 10 points; Polytechnic, 9 points.)

This match, played at Wimbledon, resulted in a win for Guy's by 2 goals to 3 tries. Although playing three short, Guy's managed to score twice in the first half, through Burney and Layton. Gardiner converted both tries.

In the second half, Polytechnic, playing with a strong wind, had much the better of the game, and, in spite of good tackling by the three-quarters, scored three times. None of the tries were converted, and Guy's won by one point. Team:—

Guy's.—J. J. Gardiner (back); E. W. Jupp, W. H. Burney, A. Tolhurst (three-quarter backs); C. P. Harvey, A. E. Kynaston (half-backs); W. W. C. Jones, H. D. Smart, L. Moiser, T. B. Layton, R. P. Marshall, L. D. Stamp (forwards.

Remarks.—The forwards worked hard, Layton perhaps was the pick, his try being a very smart effort. The three-quarters tackled well; Harvey played a good game at half.

Association Football.

GUY'S v. ST. BARTHOLOMEW'S.

Inter-Hospital Association Cup.—Semi-Final Round.

(Guy's, 5 goals; Bart.'s, nil.)

This match was played at Chiswick, and ended in a walk over for Guy's by 5 goals to nil.

The ground, although supposed to be unfit, was in very fair condition, considering the weather. Ward did not turn out for Bart.'s, which considerably weakened their forward line.

From the start, Guy's were in splendid form, especially the forwards, who were well together and showed excellent combination, which resulted in the scoring of 3 goals in the first half.

Changing over, the play was all in the Bart.'s half, except for one or two good rushes on the part of their forwards, which, however, were well checked by our backs, Wilson being especially prominent. Guy's continued to press till the call of time, finally adding 2 more goals. The score would have been considerably increased but for the splendid display by the Bart.'s goal-keeper.

GUY'S v. ST. MARY'S.

Inter-Hospital Cup Tie.—Final Round.

(St. Mary's, 2 goals; Guy's, 1 goal.)

Before a fair number of spectators, this match was played at Queen's Club, in splendid weather, and resulted

in a win for Mary's by 2 goals to 1, and this result came about by an absolute want of spirit and dash amongst the Guy's forwards, who from start to finish never seemed to realise that they were fighting a final cup-tie, in spite of the splendid example set them by Robson at back.

On the contrary, the Mary's men played up for all they were worth, and by simple dash won the day.

At the start of the match play was fairly even, but later, after a good run by the Mary's forwards, a corner was obtained against us which was well kicked and resulted in a somewhat lucky goal for Mary's. Guy's now made several futile efforts to equalize, Wilson having bad luck in being fouled in front of goal, just as he was about to shoot. Play now ruled fast and even, but by an unfortunate mistake on the part of our goal-keeper, Mary's were enabled to double their score. Thus at half-time the score was Mary's 2 goals, and Guy's nil.

In the second half Guy's realizing that defeat stared them in the face, strove hard to pull themselves together, Barber on more than one occasion making splendid efforts in spite of being well marked by three of the Mary's men. This resulted in Norton being able to score our only point from a scramble in front of goal.

Mary's now played up still harder and made several ugly rushes which, however, were brilliantly stopped by Robson and Wilson at back.

Just before time, from a free kick in front of goal, Chignell might possibly have equalized matters, had he attempted to touch the ball as it went for the net.

Remarks.—Of the forwards Barber played well and with considerable dash, although very much handicapped. Norton was at times good. Chignell was certainly the weakest on the field. Amongst the halves, Cannon showed to best advantage. At back, Robson and Wilson played a splendid game and set a fine example of determination and hard work, which the rest of the team, with one or two exceptions, would have done well to have followed. In goal, Collins made his only mistake of the season.

GUY'S 2nd XI. v. ST. MARY'S 2nd XI.

Inter-Hospital Junior Cup.—First Round.

(Guy's, 9 Goals; Mary's, Nil.)

This match was played at Honor Oak Park, on Friday, March 1st. Guy's, who were well represented, had much the better of the game German (2) and Penford (2) obtained goals in the first half. In the second half, goals were obtained by German (2) Penford (1) and Langdale (2). Our backs played a safe game throughout. Cameron was much the best of the halves; Bent and Brailey were wild at times. Of the forwards, the outsides did not play up to form, but the centre and insides played exceptionally well. Team:—

Guy's.—S. P. Wadson (goal); S. M. Wells and J. Braithwaite (back); R. V. Bent, J. Brailey, J. Cameron (half-backs); T. H. Edey, H. M. Langdale, H. B. German, L. Penford, P. Peall (forwards).

Appointments.

CIVIL.

Ensor, C. A., L.R.C.P. Lond., M.R.C.S., has been appointed Certifying Surgeon under the Factory Acts for the Tisbury District of Wilts.

Fotherby, H. A., L.R.C.P. Lond., M.R.C.S., D.P.H. Cantab., has been appointed Clinical Assistant to the Infirmary, Parish of St. Matthew, Bethnal Green, E.

Jenkins, C. Campbell, L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glas., has been re-appointed Assistant Medical Officer for the Workhouse at Cardiff.

McGavin, Lawrie Hugh, F.R.C.S. Eng., has been appointed Assistant Surgeon to the Hospital for Women, Soho Square, W.C.

Pye-Smith, P. H., M.D. Lond., F.R.S., has been appointed an elector to the Chair of Physiology in the University of Cambridge.

Sharp, Arthur J., M.D., F.R.C.S., has been appointed Surgeon to H.M. Coastguard and Royal Naval Reserve at Whitby and district.

NAVAL AND MILITARY.

Staff-Surgeon Robley J. H. Browne, R.N., has been appointed to the *Alacrity*, on promotion; Surgeon Philip N. Randall, R.N., has been appointed to the *Duke of Wellington;* Surgeon Charles R. Nicholson, R.N., to the *Cambrian;* and Surgeon John H. Jones, lent to the *Britannia* for the *Racer* for cruising season.

Acting-Surgeon Arthur Charles Elliman has been appointed Surgeon-Lieutenant, 1st Cadet Battalion the Queen's (Royal West Surrey Regiment).

Captain F. S. Brereton, R.A.M.C., has been invalided from South Africa, and is returning in the *Simla.*

Surgeon R. F. Clarke, R.N., is appointed to Plymouth Royal Naval Hospital, and Surgeon Chas. Rowley Nicholson, R.N., is appointed to the *Cambrian* on the S.E. Coast of America Station.

Birth.

WAINEWRIGHT.—On February 27th, 1901, at 49, Wickham Road, Beckenham, Kent, the wife of Robert S. Wainewright, M.D. Lond., of a son.

Marriages.

HIGGENS–MORRAH.—On February 28th, at St. John's Church, Notting Hill, by the Ven. Robinson Thornton, D.D., Archdeacon of Middlesex, Vicar of the parish, Hugh Arthur Higgens, son of William Higgens, Esq., of Cheriton, Hants, to Emily Caroline, second daughter of the late Colonel Morrah (formerly of the 60th Rifles), of Winchester.

KOETTLITZ–BUTEZ. — On March 2nd, Reginald Koettlitz, M.R.C.S. Eng., L.R.C.P. Edin., son of the late Rev. Maurice Koettlitz, of Dover, to Mary Louise Butez, only daughter of the late Louis F. A. Butez, of Calais.

Death.

McILROY.—On February 8th, in the Red Sea, on board the P. & O. steamer, *Britannia*, William McIlroy, aged 27 years.

Ed.—L. E. S.

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Notice.

All Communications, Articles, Letters, Notices, and Books for Review, should be forwarded, accompanied by the name of the sender, to the Editor, GUY'S HOSPITAL GAZETTE, *Guy's Hospital, S.E.*

Any of our Subscribers who may be desirous of having their numbers of the GAZETTE *bound should leave them with the Librarian.*

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All financial communications, as well a subscriptions, should be sent to the Financial Editor, Mr. C. H. WELLS, SECRETARY'S OFFICE, GUY'S HOSPITAL.

The charge for binding in blue, with the Arms of the Hospital in gold will be ONE SHILLING AND SIXPENCE.

Calendar of Coming Events.

March, 1901.

Sat. 30.—Messrs. Jacobson and Fripp's take-in; Drs., W. H. Bowen and M. W. Cohen; Cl., F. G. Gibson.

April.

Mon. 1.—Cambridge third M.B. Schedules to be brought to Medical School Office for signatuue.

Tues. 2.—First part of Camb. D.P.H. Exam. begins.

Thur. 4.—Messrs. Howse and Symond's take-in; Drs., J. Urquhart and A. H. Turner; Cl., E. C. Bevers.

Fri. 5.—Good Friday, Medical School Office closed.

Mon. 8.—Easter Monday, Medical School Office closed. First M.B. Durham Exam. begins.

Tues. 9.—May Appointment List closed.
Final Conjoint Exam. begins.
Second part of Camb. D.P.H. Exam. begins.
Test Exam. for L.D.S. Eng.

Wed. 10.—Test Exam. for 1st Professional Exam. for L.D.S. Eng.

Thur. 11—Messrs. Lucas and Lane's take-in; Drs. G. E. Malcolmson and A. E. H. Pakes; Cl., E. F. S. Heap.

Fri. 12.—Last day for names to be sent in for 3rd M.B. Camb.

Guy's Hospital Gazette,

MARCH 30, 1901.

Aortic Regurgitation.

CLINICAL LECTURE BY DR. SHAW,

January 5th, 1901.

GENTLEMEN,—I see that I am announced in the colonnade to lecture to you to-day on Aortic Regurgitation. I may say at once that I have no such ambition. I should not like to attempt, in the scope of a single lecture, to go over so large a subject. What I really propose to do is to draw your attention to three points connected with this condition which are illustrated by three cases at present in attendance at my out-patients'. They all of them are suffering from aortic regurgitation, and in order that you may get these three points clearly in your mind, and, if possible, take away something from this lecture, I will tell you at once what the three points are. One, illustrated by one case only, is the question of aortic valvular disease being produced by rupture of a healthy valve. The second point, illustrated by two of the cases, is the association of aortic and mitral disease, and I want to discuss with you the conditions under which the association of these two lesions takes place and the difficulties that may present themselves in diagnosing their co-existence. The third point which I want to lay stress upon is the treatment of certain symptoms of aortic disease by nitro-glycerin and digitalis.

The first point, you notice, is a question of cause, and I thought we might lead up to this very rare and special cause by considering for a moment the general causes of aortic regurgitation. Whenever you have an orifice which is closed by a valve, or by a door, or by any sort of means, the closure may be ineffectual, either as the result of some defect in the orifice, or in the mechanism which closes it. I will say nothing to you to-day about defects of the orifice as producing aortic regurgitation. None of my cases illustrate this condition. You know, however, that the aortic orifice may become dilated, as in aneurysm of the aorta, and that there may be regurgitation through the orifice, although the valves are perfectly healthy.

But if it is not the orifice which is at fault, then there is some defect in the valve, and when you come to consider valvular lesions as producing aortic regurgitation, you may look at the question (*a*) from the point of view of the character of the deformity of the valve which

renders it incompetent, or (*b*) from the point of view of the pathological process which produces the deformity. Under the former heading, which I do not propose to deal with to-day, you may consider whether there is a shrunken valve, or a hole in the valve, or a detached valve, or whether the edges of the valves are retroverted. Under the latter heading may be discussed traumatism, atheroma, and endocarditis.

One of our three patients is, I believe, an example of traumatism, the rarest of all the conditions giving rise to aortic regurgitation—a condition, the existence of which is, indeed, by some people doubted. The other two illustrate the commonest causes of aortic regurgitation, atheroma, and endocarditis. The first case, representing this very rare condition, is, I believe, an example of traumatic rupture of a healthy valve. Here we have an instance of strain producing the disease, but strain suddenly applied and producing a sudden lesion. The second case is an example of a strain constantly applied and producing a gradual lesion as the result of atheroma. This patient is a sawyer, and he has gradually acquired aortic regurgitation as the result of his excessive labour. The second common cause is represented by a young woman who has had rheumatic fever several times, and, in consequence, has acquired endocarditis leading to aortic regurgitation.

I think it may be worth while showing you the man who has got this very rare disease. I will tell you briefly his history. He is a young fellow, about twenty-one, and is a cook on board a steamer. Up to about a year ago, so far as he can remember, he had never suffered from any disease of any sort. His history has not, I fear, been investigated in the same thorough way as it would have been done had he been an in-patient and reported upon by a careful ward clerk, but I satisfied myself that he had never had any attack of rheumatism, or chorea, or scarlet fever, the conditions which commonly give rise to endocarditis; and, moreover, he describes himself as having been absolutely healthy previous to his present illness, and able to run about and jump, and, in fact, "do anything." Whilst at sea, about a year ago, he endeavoured to lift a very heavy saucepan, and immediately felt a severe pain over his heart and became faint and collapsed, and had to lie down, and when he reached port he was carried on shore. He stayed in hospital at Hamburg several months, where he was told he had injured his heart. Eventually, on being discharged, he came over here, and when I saw him at my out-patients' he had then all the classical signs of aortic regurgitation.

(At this stage of the lecture the patient was brought in.) Dr. Shaw, continuing, said:

You see that he is thin and pale. I counted his pulse just before I came to the lecture, and it was then 120. You may be able to see that there is very obvious pulsation of the carotids. As a matter of fact, if you could get him in a good light and watch him carefully, you would see that the whole head is throbbing with each beat of the heart, so that you could quite easily count the pulse without putting your finger on an artery. The legs are free from œdema. Although his pulse is 120 he has not, and never has had, any obvious sign of so-called backward pressure effects.

When he came to me his chief symptoms were breathlessness and palpitation of the heart. He has never been able to do any work since the acute onset. After he had been under my care some little time he was attacked with violent angina-like pains in his chest which went down his left arm. I prescribed nitroglycerine, which had a good effect. Since then he has developed a more constant pain in his heart, which I have not been so successful in removing by putting on plasters. He is, in fact, a typical example of aortic regurgitation, and the interest of the case lies in the fact that he is possibly an example of the rarest cause of this condition. (The patient now left.)

I ask you to believe that this man when trying to lift a weight altogether beyond his strength, ruptured one of the cusps of a healthy aortic valve. I could not ask you to believe this, nor should I be disposed to do so myself, unless there were evidence from other cases that such an accident might happen. The evidence in favour of such possibility is slowly increasing, but, as I shall explain in a moment, it is difficult to make it quite conclusive.

Many similar cases have been recorded, for example, there is the case of a housemaid, aged 21, who tried to lift a heavy bedstead and she could not, and while she was exerting herself she suddenly felt a violent pain over the heart. On examination, her doctor heard a bruit indicating aortic regurgitation. There is another case of a man, 35 years of age, who, while carrying a very heavy patient upstairs, suddenly felt a most violent pain, and immediately had symptoms of aortic regurgitation. In fact there are many such cases. Peacock, years ago, collected nineteen

Now for the difficulty in establishing the proof. There is no doubt whatever, of course, that patients who have got *diseased* valves may rupture these valves. Any number of cases are on record of patients who, being known to be the subjects of endocarditis, have, after making some unusual exertion, had very sudden and acute pain in their hearts; their hearts have gone to pieces so that they have died within a few days, and one of the cusps of the valve has been found entirely detached. Hence there are people who say, "These cases which you introduce to us as examples of traumatic rupture of a *healthy* valve are cases of traumatic rupture of a *previously diseased* valve. No case of aortic regurgitation due to a ruptured valve has immediately died. The patients do not, as a rule die till months or years afterwards, and by that time, of course, the ruptured valve has taken on all sorts of changes which might be evidence of preceding disease. The valve gets vegetations upon it and becomes thickened and fibroid, and, in fact, gets into a condition the cause of which might not be subsequent to the injury, but antecedent to it. While we are on the subject of traumatic rupture of valves, I may mention that there are also a few cases on record in which the cause was not personal effort on the part of the patient, but a violent blow on the chest. One such case died three days after the accident, and a ruptured healthy valve was discovered. Altogether, I think we must regard it as a fact that healthy valves may be ruptured, and I think we are justified in suspecting that this accident has happened to our patient.

The second patient is a man, a sawyer. He is 45 years of age, and he comes to me because he has been gradually getting breathless and pale, with œdema of his legs. I am not introducing his case to your notice as an example of chronic strain producing valvular disease of the aorta, but as one of the association of aortic disease with mitral regurgitation.

The third case is one of endocarditis producing aortic regurgitation. This is a woman, only 23 years of age, who has had four attacks of rheumatism already. She did not suffer very much with her heart until she was recently confined. After the baby was born she began to feel breathless, and had some cardiac palpitation. I may remind you that rheumatism is a potent cause of endocarditis, and also that women with valvular disease generally do very badly after their confinement. The disease very often makes very rapid progress during the period of pregnancy. She has not only aortic regurgitation, but also mitral stenosis.

These two cases, you see, are examples of the association of mitral disease with aortic disease, and we will first discuss the conditions under which these two lesions are associated. I have often been in the habit of telling you that whenever you find two lesions—A and B—in one patient, you should try and make up your mind, if you can, whether A produces B, or whether B produces A, or whether both A and B are produced by some other cause.

I will tell you at once that aortic disease constantly leads to mitral regurgitation. Aortic regurgitation gives rise to dilatation of the left side of the heart, and the mitral orifice is thereby so enlarged that the normal valve is unable to close it. Case No. 2 is an example of mitral regurgitation, resulting from aortic disease in this manner. Theoretically, one might argue that the atheroma which had crippled the aortic valve, had had a similar effect upon the mitral valve, but in the post-mortem room we do not find this to be the case. If you are confident that the aortic disease is due to atheroma, you may be equally confident that the mitral regurgitation is a secondary symptom due to dilatation of the heart.

Does mitral disease ever lead to aortic disease? I should like to say at once that it does not. I do not believe that you ever find a patient with disease of his mitral valve getting aortic disease merely as a result of the mitral disease. I have now and then seen ward clerks looking at a case of this sort and reasoning thus:—"This patient has got mitral regurgitation; this is due to, or has led to, dilatation of his left ventricle, and the dilatation of his ventricle has produced aortic regurgitation." Now that is a thing which I would strongly impress upon you, never happens. No amount of dilatation of the left ventricle will ever produce aortic regurgitation. I should like you to have that fact firmly fixed in your minds. The reason is quite obvious; it is because the aortic valves are not in the ventricle. The mitral valve is right in the ventricle and the fleshy part of the heart, and if the heart become dilated, then there will be mitral incompetence. But the aortic valves are set in the aorta, and the aorta itself must be dilated in order to produce aortic regurgitation in association with healthy semilunar valves. Therefore, never explain aortic disease as dependent upon mitral disease. If the mitral disease is precedent to the aortic disease, you may safely conclude that

the cause which has led to the mitral disease has also affected the aortic valve and produced aortic disease.

The condition in which both results are due to one common cause is endocarditis. In rheumatism it is quite usual, when the mitral valve becomes affected, for the aortic valves also to become affected. Our last patient is an example of this; she has mitral stenosis and aortic regurgitation. We must assume that during some of her previous attacks she had endocarditis, which affected both her aortic and mitral valves. Thus, when a patient is suffering from both aortic and mitral regurgitation, you must endeavour to decide whether the aortic lesion is responsible for the mitral lesion, or whether both are due to the same cause; but you may neglect the possibility of the mitral lesion being the primary cause of the aortic disease.

How are you to tell, when your patient has aortic disease, that he also has mitral disease? If a man has any form of aortic disease, he is very likely to have a systolic bruit, and, having this bruit—due to narrowing or obstruction of his aortic orifice—it is sometimes difficult to be quite sure whether a systolic bruit at the apex is the transmitted aortic bruit or the bruit of mitral regurgitation. There is one warning that I wish to give you. I hear students often say, "This must be mitral regurgitation because I can hear the bruit in the axilla, and trace it to the angle of the scapula." If the systolic bruit is a loud one, the fact that you can hear it in the axilla and trace it to the angle of the scapula, is no evidence that the patient is suffering from mitral regurgitation. I have known patients with systolic aortic murmurs so loud that they could be heard some distance from the bed. A man with aortic stenosis once came to me. I asked him what was the matter, and he replied, "There is nothing the matter with me, sir, but my wife says that there is such a noise going on in my chest that she cannot sleep at night." Do not you think that you might have heard this bruit in the axilla and traced it to the angle of the scapula? In order to determine that a man has mitral regurgitation, in addition to his aortic disease, you must make out that he has a bruit at the apex of a different character to that at the base. If you hear a rasping bruit at the base, and a soft, blowing murmur at the apex, then you may be pretty certain that you have to deal with mitral regurgitation as well as aortic disease. Do not make a mistake by confusing difference in intensity with difference in character.

Now one or two words about the difficulty of diagnosing mitral stenosis in association with aortic regurgitation. A canon that you should always observe is this: Be very careful about diagnosing mitral stenosis when you are sure that you have aortic regurgitation. A second canon: Be rather careful about diagnosing aortic regurgitation when you are certain that you have mitral stenosis. I will tell you why. About the time when I was a medical ward clerk, physicians were getting very much troubled about the frequency with which, having diagnosed mitral stenosis in association with aortic regurgitation, they went down to the post-mortem room and found nothing wrong with the mitral valve. They had diagnosed mitral stenosis because there was the special bruit of mitral stenosis, that is to say, a presystolic bruit or mid-diastolic bruit audible at the apex of the heart. When this occurred, modest physicians, finding that there was no mitral stenosis, said, "I suppose I have made a mistake," but when they had done this dozens of times they began to say, "We cannot be making these constant mistakes; it cannot be that in all these cases we thought we heard a presystolic bruit when there was not one. There must be some other explanation of this presystolic bruit occurring in association with aortic regurgitation." After that a physician named Flint suggested an explanation with which, I think, most of you are now familiar. He showed that when there is aortic regurgitation, it is exceedingly likely that conditions will be produced which will make a presystolic bruit, even when there is no mitral stenosis. I will draw a diagram here (on blackboard) to show what I mean. Suppose this to represent the semilunar valves, this the aorta, this the ventricle, this the auricle, this the mitral valve, and this the auriculo-ventricular orifice. If there is a refluent blood-stream through the aortic orifice into the ventricle, this flow of blood may obviously impinge upon the aortic flap of the mitral valve, and the stream of blood coming from the auricle into the ventricle will be unable, as it normally does, to push this cusp entirely out of the way. This, I think, is a very reasonable suggestion. But mitral obstruction thus produced will not be demonstrable in the post-mortem room.

Some physicians are not quite satisfied that this is always the explanation; it may not be, and there is another simple explanation offered, an explanation which may also be made use of when we hear a presystolic or mid-diastolic bruit without either aortic regurgitation or

actual narrowing of the mitral orifice. I have already pointed out to you that dilatation of the left side of the heart will cause an enlargement of the mitral orifice of such an extent that the normal valve is rendered incompetent. But you must remember that the fibrous attachments of the mitral valve will prevent the dilatation of the orifice being as complete as the dilatation of the cavities on either side of it. As soon as the dilatation of the cavities is out of proportion to the dilatation of the orifice, a condition is produced which, from a mechanical point of view, is identical with that which would be produced if the cavities remained the same size and the orifice became narrowed. This condition is termed "virtual" mitral stenosis, and it is undoubtedly a cause of presystolic bruits without organic disease of the mitral valve.

This is the warning that I will give you with regard to diagnosing mitral stenosis, when there is also aortic regurgitation. The two conditions that I have referred to might produce the ordinary bruit of mitral stenosis; when, therefore, you hear such a bruit you must think of these two possibilities as well as the possibility of mitral stenosis.

But I have also said that when you are confident that there is mitral stenosis, be a little cautious about diagnosing aortic regurgitation. I have a few times had under my observation patients with well marked mitral stenosis, whom I have watched for several years, and who have, while under observation, developed a distinct diastolic bruit at the base of the heart.

The first suggestion that occurs to one in such a case is that the patient, having had rheumatism producing mitral stenosis, the rheumatism has also crippled the aortic valve and produced aortic regurgitation. Now, in the case I am thinking of, this did not seem likely to be true, because as the patient's condition improved the diastolic basic bruit disappeared altogether. Now such transient diastolic bruits at the base of the heart are exceedingly rarely due to aortic regurgitation, because the condition which produces aortic regurgitation is generally a persistent one. If there is well-marked mitral stenosis, then an intermittent diastolic bruit at the base is likely to be due to pulmonary regurgitation. This is a very rare lesion and must be diagnosed with caution. But it must certainly be taken into account when a patient with mitral stenosis, presenting all the signs of pulmonary engorgement, developes a new diastolic bruit audible at the base of the heart.

I have only a few minutes to speak about the special point in treatment that I promised to deal with. In the case of the man who was in here just now, when he first came to me I adopted the orthodox treatment and withheld from him digitalis. You know it is generally said that it is not advisable to prescribe digitalis freely in cases of aortic regurgitation. I cannot now go into the reasons that have given rise to this belief. All I can tell you is, that it is unwise to withhold digitalis in cases of aortic regurgitation when, otherwise, indications for its being given are obvious. If a patient has an irregular and rapid pulse and aortic regurgitation, you had better give digitalis; if you do not, you will have small chance of arresting cardiac failure, which will ultimately prove fatal. This lad's pulse was quite regular, it still is regular, but for a time it went so quickly, and the patient was so breathless, that in order to stop the rapid action of the heart I ordered him digitalis. Then he afterwards came and said that he had had several severe angina-like attacks of pain. It is a common thing for patients with aortic regurgitation to be troubled with pain which is indistinguishable from ordinary attacks of angina pectoris, pain in the chest and running down the arm. Now I believe that I produced in my patient the symptoms of angina pectoris from my treatment. I was, however, speedily able to relieve it by prescribing nitro-glycerine. I have had other cases which have satisfied me that in the treatment of some patients with aortic regurgitation you are on the horns of a dilemma. You can either give nitro-glycerine, in aortic regurgitation, which will relieve the patient's pain, but, on the whole, increase the tendency to cardiac failure; or you can give digitalis which will diminish the patient's tendency to cardiac failure, but is very likely to increase his pain.

I do not know what is the cause of the anginal like attacks of pain in aortic regurgitation. This I know, that there is no pain which is more easily amenable to treatment, and there is no way more certain to give relief from it than by ordering your patient nitro-glycerine. If there is angina pectoris without valvular disease, I think you may give it freely and as long as the recurrence of the pain demands it, but when a man has aortic regurgitation you must give nitro-glycerine with a considerable amount of caution. You may find that you have to combine or alternate the nitro-glycerine with digitalis. What you have to do is to try and guide your

patient, on the one hand to prevent his getting severe attacks of pain, and on the other to prevent his getting cardiac failure, backward pressure, and the œdematous conditions which are the beginning of the end in heart disease. And with these two drugs judiciously prescribed you may hope for considerable success in lengthening life and alleviating suffering.

The Treatment of Uræmia.

The Treasurer's Prize Essay, by H. S. French, read before the Physical Society on Saturday, March 9th, 1901.

(*Continued*).

The net result, therefore, of present knowledge of the pathology of uræmia is, that it is most probably due to a poisonous body, or bodies, in the blood and tissues, the nature of this body, or bodies, being as yet unknown, whilst the high arterial tension possibly adds severity to one or more of the symptoms. The chief indications in treating the condition, therefore, are: first, to eliminate the poison already in the blood; secondly, to diminish, as far as possible, the production of more poison; and, thirdly, to regulate the blood-pressure, as far as possible, under certain conditions.

It will now, therefore, be possible to enter more directly upon the subject of

The Treatment of Uræmia.

In doing so, the treatment of the different varieties classified above will be taken as far as possible separately, and in the reverse order to that in which they were described.

I. *Treatment of latent uræmia.*—Medicines are here of little avail. The condition being due to an acute mechanical obstruction, surgical interference is indispensable.

If, one kidney being disorganised, the ureter of the other become obstructed by a calculus, medicines alone will scarcely provide an outlet for the urine. It is true that diuretics might be given, best, perhaps, in the form of much pure water, or fresh tea, in the hope of causing so much urine to accumulate above the obstruction that a way might be forced past it; or that the stone might be pushed on into the bladder. But such a measure could only be employed when there was no possibility of obtaining surgical attendance for the patient.

The physician may have difficulty in diagnosing the case, indeed the symptoms are so slight, quite up to the very end, that the patient may ignore the fact that he is passing no urine, and fail to seek advice before it is too late, and no time is left for operation.

The surgeon, if called in, will deal with the cause of obstruction, whatever it may be; a calculus in the ureter, a simple or cancerous growth of the bladder, or other part, a kinking of the ureter; the details of the operative procedure need not be given here. Each case will require special treatment, and, if treated surgically in time, no distinctive symptoms of uræmia will be seen, as the term "Latent" well expresses.

II. *Treatment of Eclampsia of Pregnant Women.*—A. *Prophylactic.*—When albuminuria occurs in pregnant women, there may be no actual nephritis in the sense of true Bright's disease. On the other hand, the woman may be suffering from Bright's, or other, renal disease, and become pregnant, or actual Bright's disease may begin during pregnancy. The treatment must be arranged according to the severity of the case; but the liability to eclampsia must always be borne in mind.

In slighter cases no special treatment need be adopted; ordinary clothing; ordinary non-fatiguing exercise in the open air daily; ordinary food in moderation, with regular meals; regular hours for rising and going to bed, and ordinary care in avoiding chills or exposure, such as quite healthy persons ought to take.

In severe cases it may be necessary to keep the patient indoors, with the room well ventilated, and at a temperature of about 60° F. The clothing, night and day, should be flannel next the skin, and not heavier than is quite necessary. The patient may even require to remain in bed. The diet should be mainly milk, about ℥v. being given every two hours.

The work of the kidneys must, as far as possible, be diminished by increasing the work done by the other excretory paths, namely, the skin and bowel. That the bowel acts freely may best be ensured by giving:—

Pulveris Jalapæ Compositi, ʒj. *o.n.*

or if this opens the bowels too freely *every other night.* Mercurial purgatives should not be used in kidney disease, because the mercury rapidly leads to salivation under these conditions. Occasionally, the particular sample of Jalap at the dispensary may lead to vomiting. It has been observed that at one time all the patients in the ward who take Jalap are made sick; at another time none are. If this is so,

Pulveris Scammonii Compositi, gr. xx. *o.n.*

or *every other night* may be tried. The Jalap in this may be of a variety not giving rise to sickness, when that in the Pulv. Jalapæ Co. does so.

The skin should be made to act freely also, and it is partly on account of the perspiration that flannel should be worn next the skin. The medicine most usually given is Ammonium Acetate, thus:—

℞ Liquoris Ammonii Acetatis, ʒiv.
Aquam ad ʒi.
4tis. horis, aut t.d.s.

and if this is insufficient, Tincture of Jaborandi, ʒi. may be added to each doze. Until uræmia threatens, it is unusual to give Pilocarpine itself.

Whether or not diuretics should be given is a moot point. Certainly it seems irrational to stimulate a diseased kidney to do more work; but diuresis may be brought about without actively stimulating the renal cells. Probably it is right to give non-stimulating diuretics in as large quantities as the patient will take. They should help to dilute the poison in the blood—to

wash the poison out by kidney, bowel and skin, and to flush out the kidney tubules so that they may not become blocked by renal epithelium. The simplest and best diuretic is plain water, or preferably distilled water; the latter, however, is less pleasant to take. Potassium Acetate may also be given, thus:—

℞ Potassii Acetatis, gr. xx.
Succus Scoparii, ʒi.
Aquam ad ℥i. t.d.s.

Or, very simply and satisfactorily, the end may be attained by giving caffeine and theïne in the form of hot, weak, freshly-brewed tea, in as large quantities as the patient likes.

B. *When eclampsia threatens, or is present.*—With the premonitory headache, potassium bromide should be given at once, thus:—

℞ Potassii Bromide, gr. xxx.
Aquam ad ℥i. 4tis. horis.

and, if this be insufficient, chloral hydrate may be added, thus:—

℞ Potassii Bromide, gr. xxx.
Chloral Hydratis, gr. xv.
Syrupi Aurantii ʒss.
Aquam ad ℥i. 4tis horis.

Pilocarpine should be administered subcutaneously in doses of $\frac{1}{6}$ to $\frac{1}{4}$ grain; but, later, when the patient is comatose, pilocarpine must be carefully avoided, for if profuse salivation occur under such circumstances, the patient may become asphyxiated by the secretion getting into larynx and bronchi. In any case, sweating must be ensured after giving pilocarpine, either by hot bottles and blankets, or, if necessary, by the hot pack, hot vapour, or hot air bath, described below under acute uræmia.

Should fits actually occur, the very first thing to do is to put a piece of firewood, or other suitable gag likely to be at hand, between the patient's teeth, to prevent the tongue being bitten. All constricting garments should be loosened, and the patient got to bed. If the patient can swallow voluntarily, give a drachm of Pulveris Jalapæ Compositi; if not, put two minims of croton oil, mixed with a little butter, on the back of the tongue.

Should the fits subside, nothing further in the way of active treatment need be done. If, however, they continue, the best method of procedure is to give chloroform inhalations in just sufficient quantity to stop the convulsions. The latter may be always subdued in this way, though they may return as soon as the chloroform administration is relaxed. The chloroform does not cure the eclampsia; it prevents the fits, and so both enables the patient to breathe comfortably and prevents her from becoming utterly exhausted by their violence.

And now the question of bringing on labour arises. The presence of the fœtus is the cause predisposing to the eclampsia. By removing the child, the patient's life may, in about one case in two, be saved. A consultation is advisable before this is done; but there may be no time to arrange for a second opinion. If the eclampsia is at all severe—and the most dangerous cases are those beginning before labour has come on—no time should be lost in inducing labour, since nothing exercises so favourable an influence on the condition as completion of delivery. No manipulation should be carried on except under chloroform, lest a paroxysm be set up. Puncture of the membranes may stop the fits; the rest may be left to nature in some cases.

In others, chloroform being continued as lightly as possible, Champetier de Ribe's bag may be put in, after rapid dilatation with sponge tents. As soon as the os uteri is widely enough dilated, forceps may be applied; or, if it is preferred, version may be performed at an earlier stage of labour. If the child be dead, craniotomy will, perhaps, save valuable time.

After the uterus has been emptied, the fits should become fewer if the patient is to recover. The amount of chloroform may be diminished carefully, and replaced by giving potassium bromide and chloral hydrate by the mouth, and, when the patient becomes conscious, diaphoresis may be ensured by giving pilocarpine gr. $\frac{1}{6}$ subcutaneously, with hot blankets, or hot vapour or air baths.

Hyperpyrexia sometimes occurs, and is highly dangerous. It may be treated by cold water sponging, the wet sheet, or a cold bath.

During convalescence the treatment must be, as far as possible, a combination of that for a patient with nephritis and of that for a recently confined woman.

The question of bleeding or transfusion, which may be raised should the uræmic symptoms be very severe, has not been discussed here, because it will be considered under the heading of acute uræmia.

III. *Treatment of Chronic Uræmia.*—Under this heading will not be included the concluding stages of the chronic condition, namely, convulsions and coma. These must be treated in the same way as those of acute uræmia, described below. In discussing chronic uræmia it was said that persistent headache, vomiting, diarrhœa, amaurosis, dyspnœa, sleeplessness, hiccough, were its chief symptoms, and it is with these and their treatment we are concerned just now.

The patient has some lesion of his kidneys, hence the first consideration is to relieve them of part of their work. This is done, to some extent, by stimulating the excretory powers of the skin and bowel, as described above under Prophylactic Measures in Eclampsia. The treatment, therefore, is, in milder cases, the same as that of Bright's disease in general, namely to give—

Pulveris Jalapæ Compositi ʒ ss. to i., every other night,
or Pulv. Scammonii Co. gr. xv. *o.n.*

and to give

Liq. Ammon. Acetat. ʒiv.
Aq. ad ℥j. t.d.s.

These alone may relieve the symptoms, and in very mild cases it is not necessary that the patient should even stop his daily work, except in so far that he must protect himself from chills, and must be careful to avoid fatigue.

The condition, such as troublesome headache, may persist for years, so that it is not wise to keep the patient from doing *something* to keep his time employed; the best thing is some easy business, free from too much worry. For the same reason, it is not wise to interfere too far with his diet and his meals, beyond telling him to be careful. Presumably proteid food increases the work which the kidneys have to do, but proteid food is essential to life. Hence the patient must eat meat of some kind. It is believed that it is the extractives in meat rather than the true proteid which do most damage in kidney diseases; hence the patient should be advised to eat the lighter meats, such as chicken, fish, or well-boiled mutton, rather than, for instance, hung game or beef-teas. Provided he does not eat proteid in excess of an ordinary light diet, he will probably be better with the meat than without, unless the symptoms are grave.

Further than this, remedial treatment of chronic uræmia scarcely goes; and the physician is reduced to using palliative methods, in other words, to treating symptoms. In many cases, however, this less satisfactory method of treatment yields very good results.

The morning *headache* of a chronic nephritis frequently yields quickly to a cup of hot tea. In cases of more persistent headache, uræmic in character, natural relief sometimes occurs in the form of profuse epistaxis. Following nature's lead, the physician may often give relief by the application of two leeches to the temple, or produce the same effect more rapidly and cleanly by the artificial leech.

In other cases, local application of heat to the head, in the form of hot water poultices or a heated pillow, will give ease; or, on the other hand, cold may be more appreciated, either as cold clothes, or an ice bag, or a Leiter's coil.

Of drugs, a number may be used. Nitroglycerine, given with the object of reducing the blood-pressure, and therefore the tension in the cranium, has been used with great success. For instance, in the table at the end, cases 42 and 46 were immensely relieved by it. One very satisfactory prescription was:—

℞	Liq. Trinitrini	♏i.
	Tr. Gelsemii	♏x.
	Tr. Nuc. Vom.	♏x.
	Aq. ad	℥i. t.d.

Another was:—

℞	Liq. Trinitrini	♏i.
	Pot. Acetat	gr.xx.
	Sp. Æth. Nit.	♏xxx.
	Succ. Scoparii	ʒi.
	Aq. ad	℥i. t.d.

In case 2 a good deal of relief to the headache was given by:—

℞	Phenazoni	gr.x.
	Sp. Ammon. Aromat.	♏xx.
	Aq. Menth. Pip. ad	℥i. t.d.s.

Or potassium bicarbonate in an effervescing mixture, or caffeine itself, in a mixture such as the following:—

℞	Caffeinæ Citratis	gr.v.
	Sodii Benzoatis	gr.viii.
	Liquoris Trinitrini	♏ss.
	Syrupi Rosæ	♏xv.
	Aq. ad	℥i.

t.d. aut quartis horis.

Should the *vomiting* persist, in spite of the general treatment of Bright's disease, consideration has to be given first to the food taken. If very persistent, all food should be withheld entirely for a time, or only water given by mouth, perhaps in an effervescent form with a little brandy, or as iced water sucked through a glass tube. Presently, peptonised milk may be tried, in ℥i. feeds hourly, increased to ii., iii. and iv. ʒ quickly, and presently to ℥v. feeds every two hours, to which light puddings, and in time fish and chicken, may be added if the condition improve. In very bad cases, nutrient enemata may be necessary. These should not be used longer than necessary, should not be given oftener than once in four hours, and once a day at least the bowel should be washed out with a pint of warm water. An ordinary nutrient enema consists of:—

The yolk of one egg.
Milk, ℥iv.
Sodii Bicarbonatis, gr.xx.
Sodii Chloridi, gr.xxx.
Liquoris Pancreatici, ʒi.

The egg and milk are beaten up together, and warmed to 120° F. The other ingredients are added, and the whole allowed to stand in a warm place for an hour. The temperature of the enema should be 100° F. when it is injected.

The medicines which may be used are Dilute Hydrocyanic Acid, given thus:—

℞ Acidi Hydrocyan. dil. ♏iii.
Liq. Bism. et Ammon. Cit., ʒi., 4tis horis.
(Good in Case 49).

Or Iodine, thus:—

℞ Tr. Iodi., ♏i.
Aq. ad. ʒi., given half-hourly.
(Good relief in Case 6).

Or Creosote has been given, or Cerium Oxalate; or, if very persistent, Opium. The latter must be given with great caution on account of the diseased kidneys; probably doses of morphia gr. $\frac{1}{12}$ should be sufficient.

In serious cases the patient should be kept quite at rest in bed, and a mustard-leaf to the epigastrium, or turpentine stupes to the abdomen will often afford relief.

Uræmic *diarrhœa* is best left alone, as a rule, and when present it is of course unnecessary to give Pulv. Jalapæ Co. or other purgative. It is, as it were, one of nature's outlets for the uræmic poison; and when diarrhœa is not naturally present, it is artificially produced by Jalap and similar drugs.

Sometimes, however, the diarrhœa is extreme, and may be due to extensive ulceration of the colon. Such extreme diarrhœa is very exhausting to the patient, and should be checked, but not stopped entirely. Astringents

may be then used, such as, for example, Logwood combined with some Opium, thus:—

℞	Calcis Preparat.	gr.xv.
	Pulv. Tragacanth.	gr.ii.
	Refined Sugar	gr.xxx.
	Tr. Opii	ɱv.
	Vin. Ipecac.	ɱx.
	Decoct. Hæmatoxyli ad.	ʒi. t.d.s.

If prepared, the Opium may be left out.

Tannigen is also a useful remedy when ulceration is present; the dose is up to 8 grains, but 10 or more may be given, thus:—

℞	Bism. Subnit.	gr.xv.
	Tannigen	gr.x.
	Pulv. Tragacanth Co.	gr.x.
	Aq. ad.	ʒi. t.d.

If very refractory, a Copper Sulphate pill may be used, containing $\frac{1}{6}$ to $\frac{1}{4}$ grain, with or without some Opium, thus:—

℞	Cupr. Sulphatis	gr.$\frac{1}{4}$.
	Opii	gr.$\frac{1}{4}$.
	Pulv. Glycyrrhiz	gr.ii.
	Glucose ad.	gr.iv.

One, or two, pills once a day may be used, but they are very liable to bring on vomiting, and cannot be used if there is already vomiting present.

In the cases quoted, the diarrhœa was seldom directly treated. In Case 49, however, Mist. Hæmatoxyli, as above, quite stopped the diarrhœa, although the patient ultimately died.

The *dyspnœa* of chronic uræmia must be distinguished from the cardiac or pulmonary dyspnœa which frequently accompany diseased kidneys. The hypertrophied and dilated heart may fail in its compensating powers, with consequent dyspnœa. The heart may undergo acute dilatation; there may be pericardial effusion hampering its action. The lungs may be congested and œdematous; there may be actual pneumonia; there may be a passive hydrothorax compressing the lung; or an active pleurisy with effusion; there may be infarcts in the lung from the dilated right auricle of a failing heart. None of these forms of dyspnœa are really uræmic, their treatment is therefore not included in that of uræmia pure and simple.

But there is a true uræmic dyspnœa, coming on in paroxysms, very often at night, and of an asthmatical type. Cheyne-Stokes' breathing may occur in the same patient, and neither condition seems to depend so much upon the heart or lung itself as on the brain. Cheyne-Stokes' respiration and orthopnœa of the most severe character not infrequently pass off spontaneously and as unexpectedly as they came, without treatment. But it may give great relief in such uræmic dyspnœa to give

Amyl. Nitrite, ɱv.

in capsules, to be broken on a handkerchief and inhaled, when occasion arises. Or a draught may be given thus:—

℞	Liquoris Ethyl. Nitritis,	ɱxxx.
	Aq. ad	ʒi. statim.

Or again:—

℞	Liquoris Trinitrini,	ɱi.
	Aq. ad	ʒi. statim.

In the medical reports of cases in the wards, no definite distinction is made between the various kinds of dyspnœa; and in uræmic patients it is not made clear, when dyspnœa is recorded as present, whether it was truly uræmic, or due to heart or lung directly. In addition to the above modes of treatment two others may be mentioned: in case 17, for example, acupuncture of legs, and drainage, are mentioned as giving great relief to dyspnœa for some time before death, as though the œdematous effusion was an attempt of nature's to get rid of poison from the blood, so that, on draining away the poisoned lymph the uræmia for a time improved. The other mode of treatment is by oxygen inhalations. These often give little relief, it is true, but in case 12, oxygen inhalations stopped the severe dyspnœa at once.

IV. *Treatment of acute uræmia.*—That acute uræmia is a very fatal affection, at any rate as seen in the hospital, is evidenced by the number of black crosses seen in the tables that follow; taken, as they are, from fifty consecutive cases of uræmia dating backwards from the end of 1899. Treatment, therefore, would seem to be of little avail in many cases, as far as the prevention of death is concerned.

On the other hand, case 4 is an example of a patient who twice recovered from acute attacks of uræmia, one six months, the other three months, before his last and fatal attack. And these two previous recoveries were spontaneous and rapid; as far as could be seen the patient was dying in each of them, and yet, after convulsions and coma, in three days he seemed quite himself again. And this was due to no treatment in particular. He was at home, and nothing like the possibilities of hospital treatment were at hand.

When such rapid and, for the time being, complete recoveries are possible, everything must be done to assist nature in all such cases.

Of the less extreme remedial measures, there are three different orders—diaphoretics, purgatives and diuretics. All are powerful, and all are valuable, but they are available in different respects. In order of rapidity of action they are: diaphoretics, purgatives, diuretics. In order of certainty of action: purgatives, diaphoretics, diuretics. In order of directness of action on the supposed pathological causes of uræmia: diuretics, diaphoretics, purgatives.

The practical rule to follow, therefore, is to employ diaphoretics, medicinal and non-medicinal, such as pilocarpine and hot air or vapour baths, in response to the present urgency of the symptoms: to order a smart purgative at once—croton oil, for example—as well as the daily aperient; and to prescribe a diuretic combination, which is to be given every few hours, of a kind which will not irritate the kidneys, but will tend towards a copious flow to flush the kidneys out—for example, hot water or weak tea; or, for an action in some hours'

time, a combination of potassium acetate and iodide with digitalis.

To consider the treatment more in detail:—

1. With the onset of uræmic convulsions, the first thing to do is to protect the patient's tongue; this is effected by keeping the teeth apart with a strong pencil or a piece of firewood, if nothing better is at hand.

2. He should then be got into bed, if he is not already there, and undressed and put into a flannel nightshirt, and a powerful cathartic administered, such as:—

℞ Olei Crotonis ♏i.

To be mixed with a little butter and smeared on the back of the tongue. Or:—

℞ Pulveris Elaterini Compositi gr.i. aut. ii.

3. In the next place, diaphoresis must, if possible, be brought about. Away from a hospital the only available means may be a hot bath; this should be at a temperature of from 110° to 120° F., or hotter than an ordinary hand can bear with comfort, and should last for half an hour. If the patient should regain consciousness, he should sip cold water slowly at the same time, as this greatly promotes cutaneous perspiration. From the hot bath the patient should be placed rapidly into a heated dry blanket, wrapped up in it completely, with only his head free, and laid in bed with several quite hot water bottles close outside the blanket, and another heated blanket over this. It is unnecessary to dry the patient in taking him from bath to blanket, but fresh hot dry blankets should be at hand, that the blanket in which he is rolled may from time to time be quickly changed as it becomes soaked with perspiration.

Should the patient be quite comatose, it would be dangerous to give him pilocarpine, because the secretion of saliva promoted by this drug would cause fluid to gravitate into his trachea, from which he would be too deeply insensitive to cough it up. In a sense, therefore, he would be drowned in his own secretions. If, however, he be not so comatose, an immediate injection hypodermically:—

℞ Pilocarpinæ Nitratis, gr. $\frac{1}{10}$.
Aquæ ♏x.

should be given in the first place. It is essential that such injection should be followed by diaphoresis. It may, therefore, be followed by the hot bath and hot pack described above, or by a vapour or air bath described below, and the injection may be repeated in two hours' time. Pilocarpine, however, often fails to bring about diaphoresis in cases of acute uræmia—in the tables, cases 31, 39 and 43, for example. In others, such as cases 48 and 45, profuse diaphoresis followed, but without good effect; whilst in cases 29 and 33 the diaphoresis brought relief for a time.

If the necessary apparatus can be obtained, hot air or cold vapour baths often produce great diaphoresis and relief. There seems to be no instance of their use in the fifty cases quoted: but Dr. Caiger at the South Western Fever Hospital, speaks highly of them in the treatment of uræmia following scarlatinal nephritis. He says, I think, that the vapour bath is more effective than the hot air. To give a hot vapour bath, the patient should have a mackintosh, covered by a blanket, beneath him, and over him a light blanket. The rest of the bedclothes, with a mackintosh sheet, must be raised from him by a cradle, and the clothes tucked tightly in at both sides, leaving an opening at the foot of the bed for the inlet of the steam. The latter is generated in a kettle, such as a bronchitis kettle, over a lamp: the long spout of the kettle carries the steam beneath the cradle, but the thin blanket protects the patient himself from being scalded. The temperature inside the cradle must be taken carefully, with a thermometer, lest the heat inside the bed between the two mackintosh sheets become great enough to harm the patient. The vapour bath should be continued for 15 minutes; and then the blankets must be rapidly changed for hot dry ones, without a cradle, as described above after the hot bath.

The hot air bath is similar in principle, but more difficult to arrange for. Instead of steam, air, heated by a lamp, is passed through a heated tube into the bed, under a cradle as before: the hot air passes in at the foot of the bed, and is drawn out at the top round the patient's neck; its temperature being carefully taken and regulated. Theoretically, hot dry air should withdraw more moisture from the patient than an atmosphere saturated with moisture already, but in practice, it would seem that the hot air bath is not only less easy to arrange, but is of less benefit in its effect on the uræmic patient.

4. The fourth indication, is to promote diuresis. If the patient can, he should drink freely either of hot water, or of hot, freshly made, weak tea.

If he cannot drink by the mouth, an enema of one or two pints of warm water should be given per rectum, repeated in three hours' time if patient will retain any of it.

Cupping the loins is readily done, and frequently gives great relief. This was so, for example, in cases 9 and 43. Dry cupping is more easy to do than wet, because no particular instrument is needed. An ordinary tumbler will serve the purpose. Its edges should be vaselined, to make its removal from the skin less difficult. A piece of blotting paper, steeped in spirits of wine, is lighted and dropped into the tumbler, the latter being held mouth upwards. As the spirits burn, the carbon dioxide and water vapour produced displace the air in the tumbler. The tumbler should now be inverted, so as to get rid of the burning blotting paper, lest it should scorch the skin; and it is then applied firmly to the part of the loin selected. As the tumbler cools, the water vapour in it condenses, a partial vacuum is produced, and the superficial layers of the skin are drawn up into the glass, serum and blood exude, and a large blister is rapidly formed. The process is painful, but gives great relief in some cases. When the blister has fully formed, the glass has to be removed, and it is held tightly to the skin by suction. The vaselined rim makes it easier to slip some flat instrument between the glass and the skin, and let in air: after which the glass comes away at once.

The blister must then be dressed and bandaged: or hot boracic fomentations may be applied over it.

Should the convulsions return, or persist, their very violence may immediately threaten the patient's life. His respiratory muscles may be so irregularly contracted that he cannot breathe, and may die of asphyxia. Chloroform is the immediate indication. It should be given by inhalation, and should be just so shallow an anæsthesia that the convulsions do not occur. Chloroform inhalation is not curative. As soon as the vapour is discontinued the fits recur, as shown in cases 1 and 26; but by preventing the muscular spasms, it not only enables the patient to breathe quietly, but also prevents his becoming rapidly exhausted.

Morphia is generally best avoided in patients with kidney disease; but following the administration of chloroform, the convulsions may be kept under by small doses of morphia, such as $\frac{1}{12}$th, $\frac{1}{8}$th or $\frac{1}{6}$th of a grain, given hypodermically, so that the chloroform inhalations may be suspended for a time at least.

Venesection, to the extent of twelve to sixteen fluid ounces, often gives great relief in cases of very high arterial tension, or in persons of robust frame. It is not evident in what way the blood-letting acts. The removal of so small a quantity can, according to experiments in physiology, exert but a small effect upon the blood-pressure. Possibly a quantity of the uræmic poison is removed from the body in the twelve ounces of blood, and so benefit accrues. The fact that venesection gives great benefit, at least for a time, is well shown by cases 1, 28, 33, 45 and 51. In case 16 alone, of all the cases where it was tried, did it produce no effect. To perform the operation, a bandage is put round the upper arm, just so tightly that the radial pulse is on the point of being stopped. Blood can now flow down in the arteries into the forearm, but cannot escape by the veins. The latter are much distended; the median basilic may be opened, and, leaving the bandage on, the required amount of blood is allowed to flow out. The bandage is now loosened, the veins lose their turgescence, the bleeding stops, and a light dressing and bandage are all that are needed.

Finally, the question of transfusion in uræmia must be mentioned. The first case in the medical reports of the hospital seems to be in July, 1896, when transfusion of one pint was tried. The report states that there was temporary slight improvement of the pulse, but no return to consciousness (see case 25). The next case was in December, 1898, when a patient, already comatose, was transfused two pints, and at the same time bled 14 ounces, but without effect (case 16). In case 14, transfusion was also tried, the amount not being stated; but there was not even temporary benefit.

In case 9, however, a greater amount was transfused, namely, four pints. It was followed by cupping; and, although only done as a last resource, after previous hot packs, bleeding and cupping, it was followed by temporary great relief and improvement, though it did not save the patient's life. In case 4, again, transfusion, near the end, was followed by a slight return to consciousness of a comatose patient, the amount transfused being four pints.

Case 3, when comatose, was transfused three pints, but showed no improvement as a result.

The benefit, therefore, of transfusion in uræmia was not very marked up to the end of 1899; at the same time, it must be borne in mind, the transfusion, in these cases, was almost always performed as a last resource, when the patient was almost moribund, and all other things had failed. Theoretically, transfusion should be of great benefit in at least two ways:—

(1). It rapidly supplies the patient with a large quantity of water, so that the kidneys should be more readily flushed out.

(2). It dilutes the blood, which is considered to contain abundant toxic bodies of some kind; it therefore dilutes the poison, and should, as a result, diminish the severity of the uræmic conditions.

Perhaps it acts badly, in raising the volume of the blood, and so tending to increase the blood-pressure; this difficulty may be overcome by simultaneously bleeding the patient from the other arm. The bleeding by itself has been shown to do good in some cases; perhaps bleeding together with transfusion would do more.

As to the amount to be transfused, it will be noted that, with succeeding years, the amount has risen, in the cases quoted, from one pint to four, and that with four pints the benefit was evident, whilst with one there was not any. The number of cases in the table is too small to draw any conclusion from, but four pints would seem to be an average quantity to transfuse.

Transfusion fluid is usually made up of Sodium Chloride ʒi. to water, Oi., this, strictly speaking, is too weak. To be physiologically "normal" there should be ʒi. ss. of Sodium Chloride to the pint of water, the temperature should be from 110° to 115° F. in the jug, to allow of cooling in its passage through the transfusion apparatus.

Though no case has been quoted in the following table in which cure has followed transfusion, it must be borne in mind that it is sometimes very important to restore to consciousness a comatose but still living person, even for a few minutes. For example, a signature to a will or other legal document may be of vital importance. Transfusion may offer the only possibility of procuring even such temporary consciousness, and it should then at least be tried. In one case, in the still unbound Reports, a patient was comatose from uræmia; the friends were coming from a distance to see her, and it was important that she should see them. They did not arrive before she was deeply comatose. She was transfused three pints, and recovered consciousness sufficiently to recognise her friends and hear them speak to her, before she died. Even so small a benefit may be of great importance, particularly to the friends.

V. *The treatment of fulminating uræmia.*—Nothing need be added here to the treatment of acute uræmia given above. Fulminating uræmia differs only from the

acute form in the suddenness of its onset and the rapidity of its fatal end. The treatment, therefore, cannot be different from that of the acute form, except in that there is less time to do anything for the patient, and much less prospect of warding off the fatal end.

As a kind of postscript, a further mention of Dr. Bradford's work and the possibility that uræmia may be due to perverted or deficient internal secretion on the part of the kidneys, may be made. May it not be possible some day to further investigate this point? And perhaps, should it prove true, a more hopeful outlook for the treatment of uræmia may be found in discovering a means of supplying the required internal secretion of the kidney, as has been so successfully done in the case of the thyroid gland.

(*To be continued.*)

Chapel News.

The Services in the Chapel on Good Friday and Easter Day will be as follows:—

Good Friday. 7 a.m.—Litany and Reading. 9 a.m.—Matins and Ante-Communion Service. 12–3 p.m.—Three Hours' Service, conducted by the Rev. H. V. S. Eck, Vicar of St. Andrew's, Bethnal Green. 5 p.m.—Evensong. 7 p.m.—Picture Service *in Ruth Ward.*

Easter Day. 6 a.m., 7 a.m., and 8.45 a.m.—Holy Communion. 11 a.m.—Matins and Sermon. 7 p.m.—Evensong and Sermon.

The Three Hours' Service has been arranged in consequence of many requests. It is hoped that by having it in the Chapel many will be able to get to it who would not otherwise have done so.

The Meditations at 8.15 p.m. on Monday, Tuesday, Wednesday and Thursday in Holy Week will be conducted by the Rev. J. O. Nash, of the Community of the Resurrection.

Nursing News.

Matron's Office.

On Friday, March 15th, Nurse B. Daniels (Head Nurse in Bright) left the Hospital on completion of her three years' training, to take up work at the Private Nurses' Institution. Probationer E. Thompson has been appointed to succeed her as Head Nurse in Bright Ward.

On Saturday, March 16th, Nurse Blower and Nurse Gibson left on completion of their three years' training, to take up their work at the Private Nurses' Institution. Probationer Gatward has been appointed to succeed Nurse Blower in Lazarus Ward, and Probationer Heygate succeeds Nurse Gibson in John Ward. Probationer Tilley was also appointed to succeed Nurse A. Allcock as Head Nurse in the Out-patient Department.

On Monday, March 18th, Nurse Minshall (Head Nurse in the Surgery) was transferred to Philip Ward, and Probationer Ball was appointed to succeed her as Head Nurse in the Surgery.

On Tuesday, March 19th, Nurse Houstoun left the Hospital on completion of her three years' training, to take up private nursing work at the Institution.

On Monday, March 25th, Probationer A. Davis was appointed Head Nurse in Bright Ward.

National Antarctic Expedition Bacteriological Equipment Fund.

	£	s.	d.
Amount already received and acknowledged in the Gazette	7	17	0
B. Rix, Esq.	0	10	0
G. Bellingham Smith, Esq.	0	10	6
W. Hale White, Esq., M.D., ...	1	1	0
Major E. Christian Hare, I.M.S.	10	0	0
Total	£19	18	6

Any subscriptions towards the above fund should be sent to Dr. Koettlitz, at the Bacteriological Laboratory, Guy's, who will acknowledge them in the next issue of the Gazette.

Appointments.

HOUSE APPOINTMENTS.

The following appointments have been made by the House Committee upon the recommendation of the Medical Committee:—

House-Physicians.—Messrs. T. E. Holmes (Dr. Hale White); L. E. Stamm (Dr. Perry).

Assistant House-Physicians.—Messrs. H. S. French and J. A. Butler.

House-Surgeons.—Messrs. P. W. L. Camps (Mr. Howse); J. S. Steele Perkins (Mr. Golding-Bird).

Assistant House-Surgeons.—Messrs. F. Curtis, F. G. Cross (Front Surgery); D. W. Smith (Mr. Symonds); G. Lewin (Mr. Lane); F. G. Gibson (Mr. Dunn); F. O. Stoehr (Mr. Fripp).

Obstetric Resident.—Mr. F. W. Sime.

DENTAL APPOINTMENTS.

The following appointments have been made by the House Committee upon the recommendation of the Dental Council:—

Assistant Dental House-Surgeons (April to June, 1901)—Messrs. R. J. Green and H. L. Whitlow.

Demonstrators in the Conservation Room (April to September)—Messrs. J. Cameron, E. E. Lacey, P. Scott.

Assistant Demonstrators of Dental Microscopy (Summer Session).—Messrs. G. S. H. Barnett and W. E. Griffin.

Passim.

Hurrah! The Cup has come home again. The final turned out to be but a poor fight. Our men, having obtained a comfortable lead, rested on their oars, and thus the game drifted on to the end. But the goal, the long-hoped-for result, the possession of the cup, had been reached. Was there one Guy's man who did *not* partake in the rejoicings? We hope not. Every member of the team is to be most heartily congratulated on their successful season, which by their honest, hard, and constant work, has at the end been brought to so successful a termination, leaving us in possession of the one trophy which, above all others competed for by the London Hospitals is everywhere considered to be the blue ribbon of athletics.

Only a month ago we were almost contemplating where all the cups would be stored: but it has turned out to be the old story of the chickens, and although the Rugby Cup has come, the Association Cup so near within our grasp has been lost, and the Cross Country Cup, which has been with us ever since Dr. H. A. Munro first helped us to bring it to Guy's has departed. May its succcessor stay as long.

The new appointment list for the Resident Staff is rather of the nature of a surprise packet, and the uncertainty of reward of three months' hard labour in the front surgery is again forcibly impressed upon us. It is wholly outside our province to question or criticise any individual decision of the House Committee, but if, as we understand, there is an increasing tendency to discard any *à priori* right of the surgery A.H.S. to the full house-surgeoncy and to place all six assistant house-surgeons on an equal footing of competition for the senior appointment, we feel at liberty to discuss the merits and demerits of such a principle as they appear to us.

In the first place, the post of A.H.S. in the surgery is certainly the most responsible, and probably also the most arduous appointment in the hospital, and therefore in the interests of all concerned should be held by the most capable men available. This has so far obtained, for it has been the most sought after, not so much for its intrinsic value as for the expected house-surgeoncy to follow. If, however, this expectancy is to become a diminishing quantity, and the six A.H.S.'s are to be placed on an equal footing for the senior appointment, it is hardly to be expected that this condition of things will continue. For the A.H.S. in the surgery is obviously at a disadvantage in competition with his colleagues. An A.H.S. to an assistant-surgeon, who does his work creditably and satisfactorily, has his surgeon to testify to such, but the poor A.H.S. in the surgery has no one to bear witness to the good work done there, his mistakes alone are published to the world! Surely, then, the surgery post runs the risk of taking second place in the rank of appointments. Probably this would not be displeasing to some, but it is hardly in the interests of the hospital.

Futhermore, it would seem to us that the man in the front surgery has a greater claim to the house-surgeoncy on the ground that the A.H.S. to an assistant-surgeon is, in itself, at least, a complete three months' course of experience in surgery. He has his allotted time in the surgery for diagnosis and for treatment of minor surgical cases, he has out-patients for further experience in diagnosis, and he has his cases in the wards with operations, etc.; but the A.H.S. in the surgery has no ward work, and obtains no operation experience at all. His three months' surgical experience is altogether of a most one-sided description. For this reason also, it appears to us, that the house-surgeoncy should, as far as possible, hang together with the post in the surgery. We fully recognise the fact that a too easy and matter-of-course succession from the one post to the other might have a demoralising tendency. We are only contending for that *à priori* right of the man in the surgery, provided his work has been satisfactorily carried out.

The Ladies' Night of the Debating Society, which was held on Saturday, 16th inst., was an immense success. Seats for 130 people were provided, but they proved inadequate, over 150 being present. There was a large contingent of visitors, including a fair sprinkling from the Nursing Staff. The speeches were by a long way above the average. Mr. Wacher and Mr. Kelsy excelled themselves in cynicism and mock seriousness, while the speech of Mr. Wales teemed with the most abject flattery to the ladies. But they would have none of it, for their hearts were stirred to the deepest sympathy by the plaintive outpourings from Mr. Gibson's soul on his personal wrongs, and he straightway won the day. The motion being that women's influence is essential to man's success, the house was raised to the height of merriment, when the President asked it to consider whether woman was necessary to man's existence!

The Dental Dinner last Saturday must certainly be reckoned among the greatest triumphs of that society. The record attendance would in itself suffice to make this more remarkable than any of its predecessors. It does infinite credit to the interest that the older members take in the welfare of the Society that they should turn up in such force from all parts of the United Kingdom. The fact that the excellent fare provided by the culinary department more than found its match in that derived from hearing so much admirably varied oratory may give some notion of the high order that both attained. Present as one was as an outsider, one could not but be struck by the keenness displayed by the members, one and all, on the Society's success, while one felt perhaps at the same time somewhat envious at the degree of vitality exhibited by this younger branch compared with that of the older stock— the Physical Society.

Messrs. Richard Kay, and C. C. Worts, both Guy's men, have made a most manly stand on a point of medical ethics. Briefly, as House-Surgeons at the East Suffolk and Ipswich Hospital, they have refused to supply on a printed form for the purpose, details as to name, address, occupation, nature of injury and of accident, of each patient admitted as an accident case into the hospital, for the purpose of publication in the local press. They rightly maintained that it was unprofessional to give information regarding any patients under their care without the consent of the patient or his friends. A resolution was accordingly passed by the Board instructing them to give the information in accordance with precedent. They still held to their principle, and in spite of their receiving strong support from the President of the British Medical Association, the President of the hospital, and the Editor of the *British Medical Journal*, they have been served with six weeks' notice. Their case is very clearly stated in a letter in the *Lancet* of the 16th inst. by Mr. Kay, and we are glad to see that their action is most strenuously supported by the Editor in a leader on the question. People are so apt to adopt the *laisser faire* policy in these matters, that it is refreshing to see men squarely opposing what is obviously a wrong principle, and we hope they will not suffer any severe personal inconvenience by their straightforward and determined action.

We note with pleasure that Dr. Forman, an old Guy's man, who was a member of the last London County Council, but failed to obtain re-election, has been appointed one of the Aldermen to the Council.

We are asked to plead the cause of G. A. Langford Anderson, who is a candidate for the Royal Medical Benevolent College at Epsom, and to appeal to all Guy's men who have a vote for this institution to support him, if their votes have not already been promised elsewhere. He is the son of the late Mr. Langford McEwan Anderson, of Hampton Hill, Middlesex, who died at the age of 33 of diabetes, leaving a widow and two children without having been able to make any provision for their support. Both his father and grandfather were Guy's men, the latter of whom was known to Sir Samuel Wilks. On account of the boy's age, this is his last possible application.

Guy's men have started the new century well in the province of scientific research. The February number of the *Journal of Physiology*, contains no less than three papers by Guy's men out of a total of ten. The journal commences with a paper on "The Movements and Innervation of the Small Intestine," by Prof. E. H. Starling and Mr. W. M. Bayliss. In this it is shown that the extensive experiments previously performed by them on dogs and described in a paper some time back, give practically the same results for rabbits and cats, the main difference being in the normal activity of the viscus. Further on we find a paper by Dr. Hale White and Dr. Spriggs, "On Metabolism in Forced Feeding," giving an account of analytical observations on the metabolism of a woman submitted to the Weir Mitchell treatment, extending over a period of 55 days. Finally, is a paper by Dr. Pavy and Mr. P. L. Siau "On the nature of the sugar present in normal Blood, Urine and Muscle," in which it is proved by experiments that they all contain in addition to glucose another sugar, which forms a different osazone, and to which the term "isomaltose" is applied.

Yet another use has been found for suprarenal extract. In Australia it has been employed for acne rosacea and marked success is claimed for the treatment. It is given internally and externally. Five-grain tabloids are given at first twice a day, and afterwards increased to six daily. Locally it is applied as a paint by dissolving one soloid in a drachm of sterilised water.

The New Year's picture—a representation of the last night of the old year round the statue of Thomas Guy—which was promised early in the year, is almost ready now for distribution. The drawing by Mr. Hyde has been reproduced in photogravure and it is only a question now of printing. We expect to distribute copies to subscribers some time next week. We regret the delay that has been caused, but it is impossible to hurry these matters. We have every hope that it will give satisfaction to our readers and afford a fitting companion to the last picture, "The Medical Buildings at Night," but we would remind those who may be tempted to hypercriticism, that the artist has laboured under considerable difficulties, as the mental impression which he has attempted to reproduce was a very momentary one.

To _____

With pensive air and languid stride
He passed along the colonnade,
Which glowed with mischiatic pride
Beneath a tread so slow and staid.

For well it knew his sterling worth,
His solid parts, and manly thought
For what he prizes best on earth,
His dear old Guy's—whose "boys" he taught.

Then quickly hastening to his side
His firm of dressers clusters round,
And joins him in his languid stride,
And with their chief gaze on the ground.

On either side he grasps an arm
And slowly wags his head the while,
Then nodding—with peculiar charm
He bends on each a beaming smile.

And as they wardward wend their way
Discuss the merits of each case,
Arrange for operation day—
Or if full up—how find a place.

The peaceful ward they now invade,
And stand and talk in serious tones
Of how the "-itis" may be stayed—
Of fractured base and wiring bones.

And Sister stands with folded hands,
And glances at the serious chief,
And—*sotto voce*—gives commands
To nurse, in language crisp and brief.

A dresser, then: "Sir, 'tis not clear
What's to be done with No. 5."
The Chief: "Your doing well, my dear,
Now, don't you be in such a drive."

Δ.

NOTICE TO CORRESPONDENTS.

The Editor wishes it to be understood that no communications can be inserted which are not guaranteed by the name of the sender. All articles must be written on one side of the paper only.

The Dental Society's Annual Dinner.

The sixth annual dinner of the Dental Society, postponed from February 9th, was held in the Victoria Hall of the Hotel Cecil, on the evening of Saturday, March 23rd, Mr. Lewin Payne occupying the Chair. To say that it was a great success conveys not a tithe of what your reporter, blessed with the smallest of vocabularies, would wish to express. The attendance was easily a record one; covers were laid for 175, and there were but few absentees. Telegrams expressing regret at being unavoidably prevented from attendance were read from Dr. Taylor and from Messrs. Lucas and Wynne Rouw. The Chairman, in giving the health of "The King," spoke of the interest His Majesty had always taken in the London hospitals, and more especially in Guy's.

"The Army, Navy and Auxiliary Forces" were entrusted to Mr. Lane, and, after Dr. Beddard had responded on their behalf, Dr. Spriggs proposed one of the two toasts of the evening, "Guy's Hospital: the Medical and Dental Schools." He commenced a particularly happy speech by reminding us of the ancient history of the Dental School. It goes back, he insisted, to the beginning of the last century, when Mr. Joseph Fox delivered the first scientific course of lectures on dental surgery in London. He went on to show how dependent the medical and dental schools are, the one on the other; the one could scarcely now be separated from its fellow. He congratulated the dentists on the full measure of the sunshine of prosperity in which they appear to bask directly they leave the hospital. But he would warn them the dental arch is narrowing up; soon we shall absorb all our nourishment through our skins, while the chemists' peptonising tabloids will replace our gastric mucous membrane. From those that have preceded us we have received a wealth of excellent tradition; let us, he concluded, carry them on.

Dr. Fawcett, who replied in the absence of Dr. Taylor, would have altered the wording of the toast into "Guy's Hospital and School." The dental and medical schools were now one, and it was to this unity that they owed their strength. The dental school he always looked upon as the flourishing olive branch of the ancient stock. The future of the school, he maintained, rests with the men that Guy's sends out yearly to all parts of the world; for them it was to set forth her great virtues, and it was by their efforts largely that the number of entries would be maintained. He concluded by congratulating the dental school on the success Messrs. Crofts and Spiller had obtained in the last examination for the Arthur Durham Prize.

The "Dental Society" was in the hands of Dr. Shaw. He regretted exceedingly that this was the first occasion on which he had dined with the Society. No one, he said, was more certain of its present success and of its glorious future; it was one of the most important factors in the dental education offered by the hospital. He would construe the hospital motto into "It is more lessed to learn than to be taught"—and, in fact, would willingly see a change in the regulations, whereby a paper read before, and approved by, the Dental Society, should replace the compulsory attendance at lectures. The Society conferred on its members not a few advantages. By teaching them the art of discussion, it permitted them not merely to delight the gagged patient with the wisdom of their conversation, but also to take their place in public affairs, while by promoting an annual function such as this, it brought together past and present generations, and led them to take a mutual interest in each other's welfare.

Mr. Hopson, in briefly responding, spoke of the difficulties the founders of the Society met with. Its present flourishing condition gave the lie, however, to the many prophecies of failure then pronounced for it. Its utility was proved not merely at the examination hall, but by the good work it had done in raising the general standard of professional knowledge among its members.

To the toast of the "Visitors," proposed at once impressively and felicitously by Mr. Black, Mr Lloyd Williams replied. He congratulated the Society on its prosperous state and more particularly on its successful effort to foster a social feeling among its members. To the would-be dentist two virtues he would suggest as imperative — patience and self-control — "Impatience sends up the blood more than age or sorrow."

The health of the "Chairman," the last toast on the programme, was given by Mr. Maggs, who spoke of the manner in which Mr. Payne had always consistently done his best for the School and of the capacity for taking infinite pains that he had always exhibited throughout his connection with it.

The toast was enthusiastically received with musical honours. Mr. Payne, in returning thanks, dwelt upon the manner in which Guy's men stand up for each other: how they are always ready to overlook one's faults and magnify one's virtues. To no one would he ever yield his regard for Guy's and Guy's men. Before he sat down he proposed the health of Mr. Bowle, who, as secretary, had a particularly arduous task this year in arranging the dinner, as, owing to its postponement, the secretarial work was almost doubled.

During the evening some excellent vocal and instrumental numbers were interspersed throughout the programme by Messrs. Hopewell Smith, Ta'Bois, Wyard, Campkin, Hinchcliff, Stattock, Ransford, Winckworth, Black, and Sidney Jones.

Test Examination—Biology.

March, 22nd, 1901.

(Maximum, 264.)

H. O. Brookhouse, 188; W. H. Dencer, 164; G. Cockcroft, 160; C. A. Basker, 156; A. Zorab, 150; E. Alban, 132; P. McEvedy, 103; H. F. Vandermin, 98; A. W. Berry, 78; J. A. Bullbrook, 74; A. M. Tolhurst, 74; A. L. Foster, 69; E. Morgan, 59; J. S. Bookless, 45;

In Quest of Gold.

(FROM OUR SPECIAL CORRESPONDENT IN WEST AFRICA.)

Subrie,
Sefwe District,
Gold Coast Colony.
February 16th, 1901.

I am afraid that my postal address, as displayed at the head of this letter, would give little satisfaction to the lover of geography. He might search every map in existence, including the very latest map of the Gold Districts published only a month or so back, and he would find no clue to the position of Subrie. As a matter of fact, this country is practically unexplored. A very dense forest is spread over the whole surface for hundreds of miles, and at intervals of five to ten miles patches of clearing, littered with mud huts, serve as a compound for the natives who live on the land. Small, ill-defined and difficult bush tracts connect village with village; and where the persistence of travel along one particular path, owing either to the importance of the Hinterland town which it feeds, or to the fact that it is the shortest route to the coast; where this shuffling of many feet has worn the track into a path, a species of bridle path, the dignity of road is bestowed upon it, and it may even become famous, as in the case of the now familiar Kumasi road. But you must appreciate at home that roads, as we understand them, do not exist. The path climbs over hills, down dales, and now crosses streams and small patches of boggy land. Frequently, the falling of a huge tree obliterates the original trend of the path, and a devious and less defined new route leads round the fallen giant and serves as an admirable index of native character. Faced by any difficulty, the Fantis, the Ashantis, the Apollonians, in fact, any of the races which own the black face and squat features of West Africa, alike behave in the same manner. They sit down and wait. If in the course of time the problem has not solved itself and the matter is left entirely at their own discretion, they abandon the affair as hopeless and dismiss the original project from their minds.

Should, however, some extraneous force be exerted, and the native forced to face the difficulty, he makes no attempt at surmounting the obstacle. He admits his defeat at the first brush, and only seeks for methods by which he may avoid the whole trouble at the least possible expense to himself. Cruel, petty, thieving, and destitute of honour and morality, the West African native can never find a place in the civilisation of the world. Civilisation in the Gold Coast Hinterland will come as surely as that it will come slowly, but in the process of civilisation, the aborigines can take no share, and the elevation of his country can only proceed *pari passu* with his own extinction.

I am afraid that the above has little connection with my original subject, namely, the journey of your correspondent's party from the Coast into the Hinterland. This was a matter of ten days, not altogether of an unmixed bliss, and certainly of some monotony.

I believe, in a previous letter, I explained the carrier system that holds in this country. With the premise that the native is the only beast of burden, and that his head-carrying capacity ends at 50lbs., the obvious deduction is that a party of ten white men, on a six months' trip into the bush, with camp, mining, and culinary requisites, requires a fairly long string of carriers to supply its wants. The white man—using the term as it is used on the Coast—cannot himself have direct dealings with native labour. In the first place, he cannot speak the language; in the second, he cannot find the men; and in the third, his time is too valuable to be wasted, as wasted it must be, on the numerous discussions that are irresistably bound up with all questions of native employment. So he goes to an agent—a man in trousers, boots, coat, shirt and felt hat. This man speaks English, as taught in the Wesleyan or the Church of England schools; he writes English as conceived by his own twisted little brain, and, in his heart, he believes he is English—English to the core. But his dirty little soul is black, and his dealings are in keeping with his soul, for the foul rottenness of the Cape Coast Fanti lies but partially hidden beneath the thin crust of civilization, and the slightest pressure of business brings the effeteness squirting up to the top, fouling the whole of the carefully-prepared surface. There is one Fanti agent who will learn the taste of my belt when we return, but that is a personal matter. Well, the would-be employer of labour goes to the agent, and asks for, say, two hundred carriers to carry loads up to, let us suppose, Kabensre, a distance of 170 miles from the Coast. The agent at once replies that he has the men ready, and that they can start at once—that afternoon, in fact—and that they will require 5s. per head subsistence (*i.e.*, 3d. a day for food for twenty days), £1 per head pay, and that his commission is 1s. 6d. per head. All very nice and clear. If the white man is a novice, as your correspondent was—he is so no longer—he goes away and makes all arrangements to start the next morning. He then rushes back to ask about hammock-men, eight of whom are attached to a hammock. "I want thirty-two hammock-men for four hammocks," he says. The black agent, who apparently has not moved an inch since the interview an hour ago, calls "Massah Thompson." The latter appears, and a few minutes' vowel and cleft-palate language apparently satisfies the chief. He then turns to you and says, "All right. Two hundred carriers and thirty-two hammock-men shall be at the hotel at 6 a.m. to-morrow for the start." The novice goes back and packs up his tin boxes, pays his exorbitant hotel bill, and chaffs his fellow-boarders about the ease with which his affairs are running. He little knows that the agent has already promised three other white men the same number of servants, despite the fact that he can only put his hands on fifty carriers and eight hammock-men at the most.

That is why I am going to take my belt off to the gentleman when I see him.

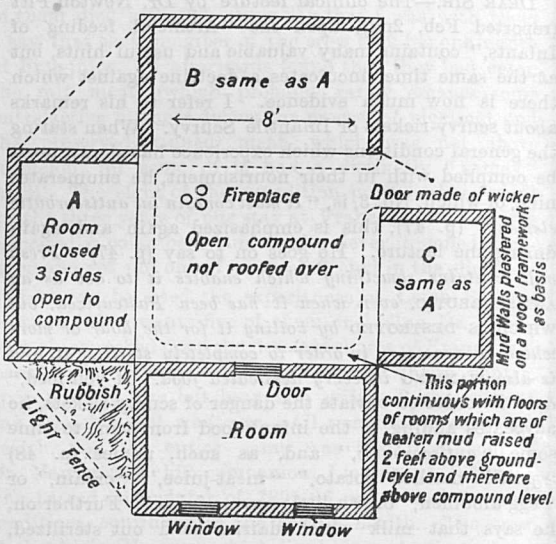
In time the traveller will start. In my case, I got away only three days late, and then had sent a lot of my stores on in front of me. When I did start, I found the agent had—the pity of it!—actually exerted himself and dismissed not only all the tools, spare food, &c., required, but half of my beds, all my mosquito-nets, my cooking-pots, pans, knives, forks, &c., my filter and my flour. We should catch them up, I heard, at the first stopping place and that it would be "all right." A favourite phrase that "all right," and one which they debase more than any other collection of words in our mother tongue. Of course, no signs of any of these stores on halting. A runner was sent back for plates, &c., and we did the best we could for the next three days with old meat-tins, cigarrette-tins, and native pots, We had teapots, fortunately, and kettles, and we used, the whole of the march, weak tea as a beverage. The advantages were obvious. The water was boiled, of a necessity, the muddy appearance was disguised by the colouring matter in the tea, and the drink was refreshing even when warm. The most extraordinary part of the whole march was that we never caught up our stores. Although we travelled fast—sufficiently fast to provoke mutinies among our few carriers—we never passed our carriers, and when at last we reached our headquarters, we found not a single man had arrived. They had heard of our coming and had lain low in the villages, carefully keeping the boxes hidden away from my sight, for I always searched round the village for missing carriers in the hope of retrieving our missing necessities.

If I give an outline of the day's proceedings, a sufficient indication will have been made of the whole journey; for as I said above, monotony was a leading characteristic of the march. Five o'clock, while the sky was still dark, and the sun had not yet commenced his daily round, saw me wearily pulling on my boots, in order that I might wake the cook with a certain amount of ease. Then my boy who had turned out of his dust heap and shaken himself, wanders off to get water and half an hour later the place is in a stir. Breakfast, of tea and toast, if bread be available, comes to the table about six o'clock, and half an hour later the party is on the road. We usually walk, unless sick, for half the day, and ride the remainder. For my own part, I preferred to walk the whole way, and certainly think that one's health profits thereby if care be exercised, and the traveller turn into his hammock when fatigued. The hammock is a canvas arrangement, with eyes and strings at either end, threaded through a curved wooden stretcher, This is lashed to an eight foot bamboo pole just where the pole is pegged on to two flat boards running at right angles to the pole. These latter are borne on the heads of four hammock men, two to each, and the traveller swings in his hammock between his four carriers. Four other men tail on as a reserve to replace the first lot when they become tired. Although the hammock is welcome when the traveller is hot and tired, or when sick, yet to the average man in health the journeying is decidedly monotonous, and the jolting of the hammock-men distinctly unpleasant. When possible a hood is tied over the whole length of the hammock, to protect from the sun, but on the whole, the bush is so dense, that the hood is not only unnecessary but inconvenient from the avidity it shews for hanging creepers.

The hammock-men, despite their long experience, are anything but experts in the carrying of the "hammungah." They possess all the love of the London 'bus drivers for tight places, with none of his skill in steering. Given two trees with a narrow interval between them and it is one hundred to one that the leading men will try and take the hammock through the pass. But it is one thousand to one that in so doing either the front cross-bar, the hammock-cover, or yourself will come into violent collision with one of the trees. It is quite probable that the hammock will be knocked off the heads of the men by the impact, and then descent is swift and stoppage sudden. But this is not the sum total of the offences that these men can commit. They are peculiarly fond of a certain species of fish, like a herring, which is "cured" by exposure to sun and flies for a week or so. By that time the stench which each fish exerts is simply appalling, and the sum total emitted by ten days' store of this stuff for eight men is better imagined than described. No doubt the palate which appreciates "stink-fish" shows a high state of education, but it is "caviare to the general."

About 11 o'clock we halt, either in a village, or in the bush by a stream, and the breakfast "chop" is prepared. This consists of tinned stuff, rechauffé by the cook, and is usually distinctly not a success. I could wax eloquent on tinned meats, and I would, but the subject is too vast and I should become too libellous for the GAZETTE. Still it is food, and we feel by the time it is ready that we want it, and it goes down somehow. The day's march finishes about 3 p.m., and by that time we have reached the village marked down as our sleeping-place. On arrival, our headmen proceed to find quarters, bundling the occupants of the best house in the village into the road and erecting our bedsteads and camp furniture beneath the shelter of the huts. I have given you a diagram herewith of the huts as laid out by the native architect. The flooring, which is of a peculiarly hard mud, smoothly polished and of a terra-cotta colour, is cool and clean. The roof, thatched with palm-leaves, holds myriads of insects and vermin of all sorts. Still, it must be admitted that my first introduction to a native hut was an agreeable one, and the luxury of the dwelling, though not great, is certainly far higher than I should ever have imagined. You will notice in the plan of the huts, that three circles are labelled "fire-place." These circles represent three "mammillary processes" made of red clay, about eight inches high and five inches in cross section. Dried wood is laid between them, fired, and the pot is placed on the summit. The protection afforded by the surrounding

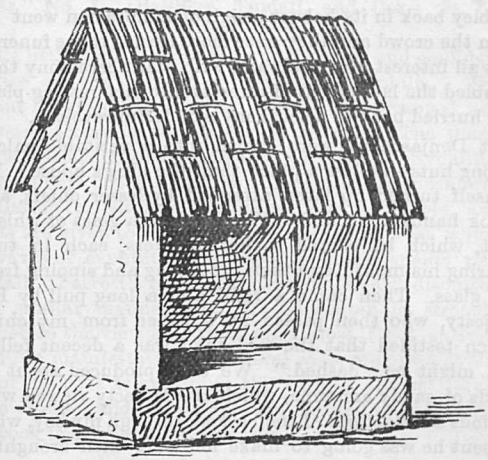
portions of the hut, makes this method of keeping a fire going quite effective. Sometimes a second fireplace is temporarily erected, earthenware pots of red-clay, the size and shape of the "art" pots used for ferns, etc., at home, are placed bottom upwards and the fire built between them. The first time I saw one of these stoves I was strongly reminded of the hot-potting incident in Rider Haggard's "She," for these pots would serve that purpose admirably.



Plan of Native House.

In the morning, on leaving the village, the proprietor of the house is "dashed" one shilling, and all parties are left content. Sometimes, however, a Shylock among them demands two shillings and sixpence, or even more—in one case ten shillings. The reply to such an impudent demand is such that the budding capitalist seizes the proffered shilling and makes off as quickly as possible.

At every stoppage a small out-patient department forms itself to see the white "doggeder" or "doctah." All sorts and conditions of ailments turn up, starting usually with cuts and lacerations on the feet of carriers and hammock-men. As part of my stores consisted of ung. eucalypti, which I used for small cuts and abrasions, my out-patient department showed signs of rapid increase, for their noses assured the natives that my medicine was both powerful and good. One ruffian, who carried the specie box, and who was attached to us on pain of death if he were not in sight and we had to go back for him, developed strained trapezii muscles, and was caught annointing his body with the medicine served out for the cure of his neck. They liked the smell immensely, and tried to get the stuff whenever they could. Later on I received visits from gentlemen with guinea-worm, with yaws, chronic abscesses, ganglia on wrists, and in one village was dragged off to see an old lady with apparently acute osteoarthritis of her right shoulder-joint. She jibbed at the stethoscope, and refused a thermometer for a long time until my boy sucked it himself to show it was harmless. Her husband was most grateful and shook hands with me about a dozen times before I could leave his hut.



Elevation of one portion, *e.g.*, B. The roof is palm-leaf thatch.

Our own health kept uniformly good, with the exception of one member, who had his first attack of malaria—a very mild, almost abortive bout, after a very lively time with some mosquitoes. He alone was bitten on the road, and he alone developed malaria. As we had all been on quinine, five grains daily for about seven weeks previously, the value of this drug as a prophylactic when taken daily, seemed to the lay members of the party, at least, as absolutely proved. The unfortunate man who spoilt the record also became a firm believer in the mosquito theory "from personal observations."

It is a curious fact that mosquitoes are surprisingly scarce in this part of the country. We don't see them, and we don't hear them, and our skins are not bitten by them. At the same time, we have not had malaria, with the single instance mentioned above, and then there was good evidence of friend mosquito.

Some of the incidents of the road were distinctly novel. For instance, at a place called Humman, we were greeted by an indescribable stench, and on enquiry, found that a native had died six days before, and that his body was to be buried the evening of our arrival. Thirty or forty women marched up and down the village chanting and beating their hands—a lamentation for the passing of their comrade. Some of the mourners were only a few years old, and none of them showed any obvious signs of grief; but that did not matter. Then the mourning ceased, and a man and boy beat a bit of iron while the whole village surged with the corpse,

in a coffin covered with gaudy cloth, to its grave outside the village on the edge of the bush. Suddenly the procession halted and two flint-locks were discharged as a farewell to the dead. As an additional send-off, I emptied my revolver into the air. After the first shot all interest in the funeral ceased, and the whole village stood spell-bound at the sight of a white man's pistol firing six shots without reloading. When I put my Webley back in its holster a sigh of admiration went up from the crowd and they once more turned to the funeral. But all interest was dead, and with scant ceremony they tumbled the late object of interest into his resting-place and hurried back to discuss my wonderful revolver.

At Denjasee we were shown into a veritable palace among huts—no less a place than the king's house. He himself turned up later, attended by lesser chiefs, and shook hands all round. We gave him a glass of whisky neat, which he offered to his courtiers, each in turn clearing his mouth, and then crouching and sipping from the glass. Then came a refill and a long pull by His Majesty, who then passed up a paper from my chief, which testified that the said chief was a decent fellow and might be "dashed." We then produced about six yards of gaudy cretonne, which His Majesty viewed with obvious satisfaction. I then asked, through my boy, what present he was going to make me. He then brought a struggling fowl and a quantity of plantains—a poor gift, but the best he had. Seeing me level a camera at him, he started to clear as rapidly as possible, telling my boy that he wanted to put on the new cloth and be photographed in that. *Vanitas vanitatum*, and not confined to women!

As for the bush, one can say but little. A virgin forest with thick undergrowth, rendering progress, apart from the bush path, impossible, spreading up one side and down the other of numerous hills, intersected by tiny streams of muddy water, occasionally growing black and tunnel-like as the path leads past a huge spreading bamboo tree at the edge of some stream, and again opening out to hot sunshine, where the path meets a a plantation of plantains. High trees, lofty out of proportion to their diameter, palms, cotton trees, mahogany and others not unlike limes, with the common characteristic of foliage confined to the top, and no boughs or branches within eighty or a hundred feet of the ground. Green, dull green, everywhere, with a rare touch of colour in a ground orchid or a hedge lily. Kew Gardens (tropical section), spread out and multiplied by a million; universal temperature of 89° with a saturated atmosphere; an impossible sun at rare intervals in the thick forest; perspiration soaking through hat, through shirt, through breeches, even through gaiters and boots; put all these together and stir in gorgeous butterflies, strange noises of grasshopper and bird, with a very occasional sloth, and an exasperating native smell, and you will have a faint idea of West African bush. It has no beauty, nothing to charm the eye or the ear; but everywhere along the path lies auriferous quartz.

Correspondence.

To the Editor of Guy's Hospital Gazette.

Scurvy and Antiscorbutics.

Dear Sir,—The clinical lecture by Dr. Newton Pitt (reported Feb. 2nd), upon the "Artificial feeding of Infants," contains many valuable and useful hints, but at the same time, inculcates a doctrine against which there is now much evidence. I refer to his remarks about scurvy-rickets or Infantile Scurvy. When stating the general conditions which experience has shown must be complied with in their nourishment, he enumerates nine, of which, No. 3, is, "*It must contain an antiscorbutic element*" (p. 47), this is emphasized again and again during the lecture. He goes on to say (p. 47) "*Fresh milk contains something which enables it to act as an* ANTISCORBUTIC, *even when it has been Pasteurized, but* WHICH IS DESTROYED *by boiling it for the hour or more which is necessary in order to completely sterilize it, and is also* WANTING *in every dessicated food.* If you feed," &c. In order to obviate the danger of scurvy-rickets, he advocates adding to the infant food from time to time some "*antiscorbutic*," and, as such, names (p. 48) "a little mashed potato," "meat-juice," "cream," or "egg albumen," or "a little orange-juice." Further on, he says that milk which dairies send out sterilized, having been boiled half an hour or more, has undergone "*some unknown change . . . . which destroys the* ANTISCORBUTIC *properties of the milk.*"

It has been assumed that milk, &c., contain what are known as antiscorbutics, but there appear to be very grave doubts as to the correctness of this assumption.

I should like to refer to a paper upon "An experimental enquiry into Scurvy," written by Dr. Vaughan Harley and F. G. Jackson, (Proceedings of the Royal Society, vol. 66, p. 250), and to another by Dr. Neale, (*Practitioner* 1896), entitled, "Scurvy in the Arctic Regions."

The experiments were based upon theories propounded by Professor Torup, Professor of Physiology at Christiania which may be summed up as follows:—

1. Scurvy is a chronic ptomaine poisoning, induced by the continuous ingestion of foods, especially animal foods, which have undergone putrefactive and fermentative changes, which may be only of the very slightest and quite inappreciable to the taste or smell.

2. That fresh vegetables or fruit do not, to any extent, tend to prevent the bad effects of the continuous ingestion of tainted foods—or foods which have undergone slight putrefactive changes.

3. That there are no such substances as *antiscorbutics*.

4. That, in order to prevent scurvy, it is necessary to use, as food, such aliments as *are free from scorbutic*

properties, instead of seeking for remedial substances which have been ignorantly called *antiscorbutics*.

5. That lime-, orange-, or lemon-juice has not the smallest counteracting effect against the incidence, or attacks of scurvy.

My own experience in Franz Josef Land, as medical officer of the Jackson-Harmsworth Polar expedition, bears out the above conclusions in every particular. The crew of the *Windward*, were all affected with scurvy, and two of them died, although every day that I was with them I saw that each member of the crew took his one ounce of lime-juice. I afterwards found that they had eaten the salt meat (which probably rarely escapes some putrefactive changes during the process of pickling), and the preserved tinned meat, which was not above suspicion, for some of it had a distinctly "gamey" smell. The eight of the expedition proper whose meat for the three years of our stay at Franz Josef Land was principally polar bear and birds, never touched lime-juice and yet not one of us was affected in the slightest.

Next can be cited the experiences of Leigh Smith's party in 1882 (twenty-five of them, including Dr. Neale, were shipwrecked upon the desolate shores of Franz Josef Land), who had to subsist during the entire winter, upon nothing else but bear and walrus flesh, without any vegetable diet whatever. All remained in excellent health, and the entire camp was free from scurvy. Dr. Nansen and his companion, Lieutenant Johansen who passed the winter of 1895–96 under rather worse conditions, continued in the best of health. The crew of the *Fram* (Nansen's ship), lived almost entirely upon tinned food during the three monotonous years that they were locked in the ice, BUT all the tinned foods were most carefully analyzed for ptomaines before they started.

That infants, through being fed upon these sterilized and dessicated foods, do suffer from scurvy-rickets, or infantile scurvy, there can be no doubt, but this fact is no proof that, during the process of sterilization, or dessication, "*some antiscorbutic substance is removed.*" Similarly with dessicated foods. The facts point to the conclusion that scurvy, whether infantile or adult, is produced *not by antiscorbutics being removed from the food, but by the food having been allowed to become a scorbutic*—which is a very different thing. Recent evidence, then, goes to show that scurvy is a chronic condition of poisoning, the poison being a ptomaine, or ptomaines, formed during the process of pickling, preserving, tinning, sterilizing, or dessicating the foods.

It seems to me, Sir, that if attention were devoted to the ideas of Professor Torup, many facts would be brought to light which have hitherto escaped notice, because the absence of antiscorbutics is considered an all-sufficient reason for the production of scurvy-rickets.

I am, yours faithfully,

REGINALD KOETTLITZ.

Guy's Hospital, S.E.,
28th February, 1901.

Reviews.

The price of books submitted for review should in every case be stated.

Syphilis in Children in Everyday Practice. By George Carpenter, M.D. Lond. "Medical Monograph Series," No. 4. (Baillière, Tindall, and Cox.) 3s. 6d. net.

This little book forms a most instructive and complete treatise on the subject of congenital syphilis. The various manifestations of the disease are arranged and discussed according to the organs affected. The manifold cutaneous lesions are treated very fully. Syphilitic enlargements of the spleen and of the loin are considered in relation to similar conditions due to rickets, and charts are given to show the different periods at which the waves of syphilitic and rachitic enlargements rise and fall. Parrott's nodes and Craniotabes are discussed in a similar manner and Dr. Carpenter is strongly inclined to the view that these are almost if not entirely syphilitic manifestations. Several cases are given at the end of the book to exemplify the various clinical forms of the disease, and a few pages are devoted to treatment. The book is excellently illustrated.

A Manual of Syphilis and the Venereal Diseases. By J. W. Hyde, M.D. (Professor of Genito-urinary and Venereal Disease, Chicago), and J. H. Montgomery, M.D. (W. B. Saunders & Co. Price 19s. 580 pages).

This work, useful to students and practitioners alike, sets forth with detail all the practical facts connected with the study and treatment of Syphilis and Venereal Diseases and their attendant complications.

The first half of the volume is entirely devoted to the study of syphilis, where the authors object to the old classification of primary, secondary and tertiary stages of the disease, pointing out the forcible objections of recent years to this chronological scheme, and substituting a classification depending upon the relative malignancy and relapsing symptoms of the disease. Stress is laid upon the symptoms occurring between the initial chancres and the appearance of skin lesions for diagnosis, such as malaise, joint pains, raised temperature, hepatic and splenic enlargements with leucocytosis and diminished percentage of hæmoglobin in the blood, all of which, when well marked, foreshadow a severe type of consecutive symptoms.

The descriptions of the skin lesions are very full and beautifully illustrated by the coloured plates from Mracek's Atlas of Syphilis.

The chapter on hereditary syphilis is relatively short, but concise, clearly stating the relationship of the disease in infant and parent. Amongst the lesions of hereditary syphilis, we find that testicular disease is thought by the authors to be much more common than usually supposed. In the treatment of syphilis, mercury is, of course, the sheet-anchor. The use of iodides alone in

the early stages is justly condemned, the axiom being laid down that "The patient who has been relieved of syphilis without resort to iodine, is much more secure as to the future than another where a large use has been made of the iodine salts." Iodides are only recommended in gummatous conditions, for the relief of pain, as in syphilitic periostitis, and where mercury is not tolerated.

For treatment of soft sores, antisepties, painting with pyoctanin and powders dusted on are advised.

In the treatment of acute Gonorrhoea, the abortive methods are stigmatised as dangerous and only to be used exceptionally, whilst we are advised to give copaiba or other balsams with alkalies early in the disease; urotropin is advised, but all smoking is strictly forbidden. Injection of protargol in the acute stage is upheld, but irrigation of the whole urethra damned. The form, use and advantages obtained by the endoscope are fully dealt with, and valuable work is given in directing the diagnosis and treatment of a chronic urethritis.

The work is well written, and will well repay the reading by anyone interested in venereal disease; especially valuable being the articles on the relation of the practitioner to the family when confronted with venereal disease.

Appointments.

CIVIL.

Cooper, C. E., B.A., M.B., B.C. Cantab., has been re-appointed Medical Officer of Health for the Ivybridge, Devon, District by the Ivybridge Urban District Council.

Kendall, B. C., L.R.C.P. Lond., M.R.C.S., has been re-appointed Medical Officer to the Helston (Cornwall) Public Dispensary.

Munden, Charles, M.R.C.S., L.S.A., has been re-appointed District Medical Officer by the Chard Board of Guardians.

Sandoe, John Morden, M.D., B.S. Durh., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Broadclyst District of the St. Thomas's (Exeter) Union *vice* James Somer, resigned.

NAVAL AND MILITARY.

Staff-Surgeon E. R. D. Fasken, R.N., has been appointed to the *President*, additional for study.

Surgeon Walter J. Bearblock, R.N., is promoted to be Staff-Surgeon, and appointed to the *Archer* on the Australian Station, *vice* Staff-Surgeon W. J. Maillard, V.C., R.N., invalided home.

Surgeon R. W. B. Hall, R.N., has been appointed to the *Nautilus*.

Lieutenant Eugene J. O'Meara, I.M.S., is promoted to be Captain.

Dr. R. D. Attwood, has been appointed Civil Surgeon, and posted to Kimberley, South Africa.

Surgeon-Lieutenant H L. E. Wilks, 1st Wilts Volunteers, is promoted to be Surgeon-Captain.

Major S. O. Stuart, R.A.M.C., has been ordered to proceed to South Africa on an early date.

Sport.

Rugby Football.

LONDON HOSPITAL v. GUY'S.

Inter-Hospital Rugby Cup.—Final Round.

(Guy's, 21 points; London Hospital, Nil.)

On Monday, March 18th, there was a large and enthusiastic gathering on the big ground at Richmond to watch this game; the weather was fine, but there was a cold wind blowing down the field. London won the toss, and kicked off with the wind, finding touch within two yards of our line. The scrums which ensued were well contested, but Guy's forwards gradually worked back to the twenty-five yards line, and a smart punt by Wetherell took the game to mid-field.

Wall and Glendinning were given off-side, and by means of a good kick into touch, London again attacked. Anderson and Thomas responded with a useful rush, and Louisson intercepted a pass from the London centre three-quarter. Morgan put in a dodgy run, and some combined play between Orpen, O'Brien and McEvedy enabled the last-named to get well into our opponents' quarters. O'Brien tried a high kick, but the ball went over the line, and was touched down, while soon after, Morgan failed to gather a pass from Orpen, and just failed to score. Louisson worked the scrums well, but was passing out rather high, and though attacking strongly, Guy's lacked finish, while Dolbey tackled McEvedy well right on the line. Milsom backed up a long drop of Harrison's, and from some loose forward work, Thomas picked up and scored to the right of the posts, Morgan converting without difficulty. Morgan returned the kick-off, finding touch, and was soon at work again, but knocked on, and Dolbey relieved the pressure by a useful kick. Harrison, at full-back, made ground by good kicks, and O'Brien was again tackled on the London line. Scrambling play followed in front of goal, and Orpen tried a shot without result. From the drop-out London got away, mainly through Crimp's efforts, but our forwards screwed the scrum, and came back with a rush, while Louisson passed out well to Orpen, who drew the full-back, and enabled Morgan to score an easy try behind the posts, and he was again successful with the kick at goal. Our passing was for a time rather wild, Wetherell being especially at fault; but he did some clever feinting, and, passing to Thompson, gave the latter a good chance to score, which he failed to take. The London three-quarters came away well, but Harrison again dropped into touch near the corner flag, and put them on their defence. Louisson passed out smartly from the scrimmage, and Morgan was again tackled when within an ace of scoring, and the same player soon afterwards followed up Louisson's kick, but Dolbey sent the ball out of bounds. O'Brien took the drop-out rather leisurely, and his return was smothered; but Morgan made a dodgy run and passed

to Orpen, who was pushed into touch. Wall came away from a scrum with the ball, and Thomas, picking up, passed to Morgan, who dodged through the opposing backs and got over near the touch-line, being badly missed by Dolbey. Morgan again essayed the kick at goal, but the ball swerved out, and at half-time Guy's were leading by 2 goals, 1 try to nil.

Milsom kicked off, and London touched down; but came away well from the drop out, and invaded our twenty-five, Thompson and Wall returning with a good dribbling rush. London continued to play up vigorously, and our forwards seemed unable to get together, allowing their opponents to get the ball away from the pack, while offside play by Louisson spoiled a good kick of Harrison's, and further scrambling scrums took place in our territory. Louisson then got away well, and following up his own kick changed the aspect of affairs, and tight scrummaging followed on the London ine. Harrison tried a drop at goal, and, as the ball touched one of the opposing backs, Thompson, who was offside, had a splendid chance to score, but failed to touch the ball down. Orpen received the drop out and found touch in the London twenty-five, and a good round of passing between Louisson, O'Brien, and McEvedy was spoiled by the last named fumbling. Louisson, playing a good game, passed to O'Brien, who transferred to Orpen, he was not to be denied this time, and, after a strong run, scored in a good position Milsom spoiled the chance of a goal by touching the ball after "no charge" had been given by the referee. The London men were now showing signs of fatigue, and our forwards put in some good rushes, in which Anderson, Wall, and Lawry, were prominent. A good bout of passing by our three-quarter line followed; but McEvedy was bored into touch, and soon after the same player sustained an injury which caused his retirement, Milsom taking his place on the wing. Guy's forwards again rushed down on to the London line, Anderson tackling the full back before he could get his kick. Crimp pluckily responded, but was tackled well by Louisson. Lax passing by our backs spoiled more than one good chance, but the end of the game was brightened by some very fine combined work between Wetherell, Orpen, Morgan, and O'Brien which enabled the last to score, and as Morgan converted, Guy's won a rather disappointing game by 3 goals, and 2 tries (21 points) to nil. Teams:—

Guy's.—E. M. Harrison (back); E. Morgan, L. J. J. Orpen, A. O'Brien, P. F. McEvedy (three-quarter backs); M. C. Wetherell, M. G. Louisson (half-backs); H. A. Cutler, T. P. Thomas, R. C. Lawry, R. G. Anderson, B. Glendinning, A. R. Thompson, E. H. B. Milsom, A. H. E. Wall (forwards).

London.—R. V. Dolbey (back); T. G. Morgan, H. F. Curl, G. L. Crimp, W. T. Gibson (three-quarter backs); J. Grogono, B. Spearman (half-backs); E. Higson, O. C. P. Cooke, R. F. Williams, L. B. Aveling, E. F. Fisher, H. H. Cottman, M. T. Williams, R. Rolfe (forwards).

Referee.—Mr. G. H. Harnett.

Remarks.—Guy's did not make so good a display as had been expected of them, but, considering the spoiling tactics of their opponents, this is not to be wondered at. London were always the weaker team, and, with the exception of the first few minutes of the second spell, never looked really dangerous, their efforts being rather in the direction of keeping the score down than of putting up points for themselves. Crimp was by far their best back, while Higson and M. T. Williams played well among the forwards. For Guy's, Harrison was always safe, and at times brilliant, his judicious kicking making much ground for his side. Orpen was the pick of our three-quarters, and was well seconded by Morgan but O'Brien was not at his best, and McEvedy was still hampered by a weak ankle, which we hope will gain by the rest during the summer. Louisson played one of the best games we have seen, at half, but Wetherell, though often good, was passing in a somewhat slovenly fashion. The forwards were not up to the standard they showed against Bartholomew's, and wanted knitting together at times. Thomas, Glendinning and Thompson were often prominent in the loose and on the line-out, while Cutler and Wall were good in all departments of their work.

GUY'S 1st XV. v. LONDON IRISH.

(Guy's, 1 try, 3 points; London Irish, 2 goals, 10 points).

In this match, played at Herne Hill on Saturday, March 16th, in cold weather and on a muddy ground, Guy's, on account of the Final Cup-tie played only two of their regular team, but were able to turn out a fairly good team, thanks to the good sportsmanship of the old players, who throughout the season have always been willing to fill up a gap when required.

O'Brien lost the toss, and we kicked off towards the western goal. At first, the Irish, whose forwards showed much more earnestness and vigour than ours, pressed heavily. The play was soon in our twenty-five, and about ten minutes from the start, receiving a pass from the "scrum half," Dyas rushed over unopposed. Taking the kick in front of goal, the Surrey captain easily converted. Kick and counter kick having been delivered, the play almost immediately returned to our twenty-five, and Dyas repeated his performance. Thus in the space of twenty minutes we were ten points down. This misfortune served to awaken the team, which as a whole had been playing a very slack and poor game. From this point onwards, Guy's had, if anything, the better of the game, but were unable to score during the first half.

After the interval O'Brien went up half, and the forwards, who seemed to have shaken off their lethargy, gave the Irishmen a much better game. The ball came came out on several occasions, and had it not been for the want of judgment on the part of his centre, Brydone might have scored. Soon after this a pass from Wetherell to Hicks, who transferred to his wing, gave Wadson a chance of showing his pace, nor was he slow

to avail himself of the opportunity, for in a long sprint he got round the opposing centre and wing, and negotiating the full back, he managed to score an excellent try in the left hand corner. O'Brien failed with the kick. Guy's after this pressed until the end, but were never very dangerous. A rough and tumble game thus ended in a win for the Irish by 10 points (2 goals) to 3 (1 try). Team:—

Guy's.—C. D. Pye-Smith (back); G. P. Wadson, E. H. B. Milsom, A. O'Brien, J. T. Hicks (three-quarter backs); J. M. Brydone, F. C. Wetherell (half backs); D. H. Trail, P. T. Manson, K. V. Trubshaw, R. D. Griffiths, J. Evans, A. M. Tolhurst, G. T. Collins, H. S. Brown (forwards).

Association Football.

GUY'S 2nd XI. v. LONDON 2nd XI.

Inter-Hospital Junior Cup.—Final Round.

(London, 3 Goals; Guy's Nil.)

This Cup-tie, played in wretched weather on University Hospital Ground at Acton, resulted in the defeat of the Hospital by 3 goals to nil.

London, winning the toss, played with wind and rain behind them, and a minute after starting, had a penalty kick awarded them, which, however, Wadson saved well. Continuing to have the better of the game, London forced a corner, and from the kick their centre headed a goal. Before half-time, a further goal was scored by our opponents, who crossed over leading by 2 goals to nil.

On resuming, Guy's certainly had more of the game, but did not play with that dash which one looks for in a Final Cup-tie; Langdale on the right wing worked hard, and several times the London custodian was called upon to save. Before the end of the game, the London right wing got away and their inside put them a further point ahead. From this time, Guy's never looked like scoring and the whistle blew with the scores stated above. Team:—

Guy's.—S. P. Wadson (goal); J. Braithwaite, C. M. Wells (backs); P. C. Bent, H. B. German, A. R. Brailey (halves); L. Penford, H. M. Langdale, W. O. Roberts, T. Edey, P. A. Peall (forwards).

REMARKS.

Wadson in goal played well. The backs were not as good as usual. Bent at half played hard, and if German at centre-half had followed his example, the forwards would certainly have had more opportunities. In the forward line, Edey appeared to forget the fact that he had an outside man. Langdale at inside-right worked well.

United Hospitals Hare and Hounds.

Challenge Cup Competition.

The Inter-Hospital Competition took place over a ten-mile course, at Blackheath, on March 16th. Guy's, St. Thomas's and St. Bart's being represented. The result was a win for St. Thomas's, with 10 points, St. Bart's being second with 12 points and Guy's third, 23 points.

Birt and Gibb went ahead at the start and kept well together till one mile from home, when Gibb came away and won by 130 yards. The sealed handicap, decided at the same time, was won by G. A. Simmonds, with three minutes start, W. H. Barnett being second with the same start. Starter and Time-keeper, H. W. E. Sercombe; Judges, Dr. H. A. Munro, W. Rowland, and E. Ratcliff (Blackheath).

The Thomas's men had trained hard and deserved their win, and it is hoped that the loss of the Cup will be a stimulus to Guy's men to buck up at Cross Country Running and win it back next year.

Order of Finishing.

	Start.	H'cp.	Net. Time.	Order in H'cp.
1. G. G. Gibb (St. Bart.'s) ...	—	—	65.8	—
2. A. C. Birt	Scr.	65.53	65.53	3
3. G. H. Simmons (St. Thomas's)	3	63.21	66.21	1
4. W. H. Barnett (St. Bart.'s)	3	64.48	67.48	2
5. H. D. Cochrane (St. Thomas's)	3	68.47	71.47	4
6. R. E. Brayne (Guy's) ...	2	73.4	75.4	5
7. A. C. Wilson (St. Bart.'s) ...	—	—	76.21	—
8. H. P. German (Guy's) ...	4	75.18	79.18	6
9. R. S. Roper (Guy's) ...	3	77.32	80.32	7

Also ran, R. Larkin (Guy's), J. R. Trist (St. Bart.'s,) H. N. Wright (St. Bart.'s).

Notice.

The "Arthur Durham" Prizes for Dissection have been awarded as under:—

For Students in their second and senior years: Messrs. E. C. Peers, Prize, £15; J. E. Spiller, Certificate; J. A. C. Greene, Certificate.

For first year's Students: Mr. A. D. Crofts, Prize, £5 A. B. O'Brien, Certificate; F. M. Longson, Certificate; H. V. Mitchell, Certificate.

L. E. SHAW,
Dean.

March 16th, 1901.

Papers by Guy's Men.

The Movements and Innervation of the Small Intestine. By W. M. Bayliss, Esq. and Professor Starling. M.D., F.R.S.—*The Journal of Physiology*, February, 1901,

On Metabolism in Forced Feeding. By W. Hale White, M.D. and E. Ivens Spriggs, M.D.—*Ibid.*

On the nature of the Sugar present in normal Blood, Urine and Muscle. By F. W. Pavy, M.D., F.R.S. and R. L. Siau, Esq.—*Ibid.*

Birth.

WORTHINGTON.—On March 21st, at Chesterfield, the wife of Sidney Worthington, M.D., F.R.C.S., of a son.

Ed.—L. E. S.

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Notice.

All Communications, Articles, Letters, Notices, and Books for Review, should be forwarded, accompanied by the name of the sender, to the Editor, Guy's Hospital Gazette, *Guy's Hospital, S.E.*

Any of our Subscribers who may be desirous of having their numbers of the Gazette *bound should leave them with the Librarian.*

The annual Subscription to the Gazette *is* 6s. 6d.; *post free,* 7s. 6d *All financial communications, as well a subscriptions, should be sent to the Financial Editor,* Mr. C. H. Wells, Secretary's Office, Guy's Hospital.

The charge for binding in blue, with the Arms of the Hospital in gold, will be One Shilling and Sixpence.

Calendar of Coming Events.

April, 1901.

Sat. 13.—Messrs. Lucas and Lane's take-in; Drs. G. E. Malcolmson and A. E. H. Pakes; Cl., E. F. S. Heap.

Mon. 15.—Second M.B. Durham Exam. begins.

Wed. 17.—Last day for sending in Fees and Certificates for 3rd M.B. Camb.

Thur. 18.—Messrs. Golding-Bird and Dunn's take-in; Drs., C. J. Curtis and N. N. Houghton; Cl., D. L. Morgan.

Mon. 22.—Third and Final M.B. Durham Exams. begin. Exams. for M.D. and M.S. Durham begin.

Tues. 23.—Cambridge Third M.B. Exam. begins.

Thur. 25.—Messrs. Jacobson and Fripp's take-in; Drs., P. H. B. Odgers and F. H. Parker; Cl., S. J. Ormond.

Guy's Hospital Gazette,

APRIL 13, 1901.

Hæmophilia.

CLINICAL LECTURE BY Dr. FAWCETT.

February 9th, 1901.

Gentlemen,—To-day I propose to bring before you a case of Hæmophilia, a rare disease, and one about the causation of which we know very little. I will first of all read you the abstract of the case made from the report of Mr. J. A. Butler, whom also I must thank for his help in looking up some cases I shall tell you of later.

F. D., a boy of 13, was admitted for a painful swelling of the left leg. His history states that there are ten children altogether in his family, and that one child besides patient has shown a tendency to bleed rather profusely when injured, but not to the same extent as this child. The mother's father also used to bleed very profusely. The family history, as far as it goes, is characteristic of such cases, but we have been unable to determine to our satisfaction anything more than this.

Personal history states that three or four years ago patient was knocked on the head; a week later the head became very swollen and he was admitted into Guy's, where he remained for over two years. He has often had swellings as the result of knocking himself. These have subsided. He has been brought up to the hospital several times to have the bleeding from a cut stopped, and also after extraction of a tooth.

Present attack.—Patient was admitted on December 22nd, 1900, under Dr. Pitt. He did not remember hurting himself, but seven days before he complained of pain in his leg, and five days before a swelling was noticed which has gradually increased in size.

Condition on admission.—Temperature 101·2°, pulse 128, respiration 28. He is a pale, delicate-looking boy. There was a painful, tender, fluctuating swelling extending from the popliteal space halfway down the leg, and ending in a general

œdema of the leg and foot. The skin over the swelling was somewhat discoloured. The condition was thought to be due either to an abscess dependent on acute necrosis, or to a breaking down hæmatoma of traumatic origin. The swelling was incised, and a large blood clot was turned out from between the superficial and deep muscles.

December 23rd. In the afternoon the dressings were saturated with blood. It was redressed, but again came through.

27th. Recurrent hæmorrhage.

30th. It was noticed that the dressings and draw sheet had suddenly become saturated with a watery-looking blood, and the same condition recurred on December 31st, and January 3rd at 9 a.m. and 5 p.m.

January 7th. No hæmorrhage since January 3rd; but on dressing the wound it bled profusely, and some hours after this a little bloody serum had exuded through the dressings.

Throughout, the wound had been plugged and tightly bandaged with a Martin's elastic bandage, the leg having been slung higher than the body in a cradle.

It was not dressed again until January 14th, when the greater part of the incision had healed, and now the boy is making slow, but satisfactory progress, there having been no more hæmorrhage.

The first point of interest in the case is the *family history*. The patient is a boy, and it is well known that hæmophilia is very rarely met with in females. Indeed, Dr. Wickham Legg says he has never seen "a definite case in a woman," although other authorities, as Fagge, give the proportion of males to females as 13 to 1. The inheritance of the disease, however, takes place only through the females. It was so in this case, and I have another very excellent family history in point, the records of which I have to thank Mr. French for.

The patient was a boy of two and a half years old. He was admitted under the late Mr. Davies-Colley for a bitten tongue, the hæmorrhage from which was, with great difficulty, stopped. The following tree shows the family history more clearly than I can narrate it to you.

Grandmother. Grandfather.

11 Children.

Boys.	Girls.
A. 7 yrs.–died from hæmorrhage after operation.	*F.* Died, æt. 33 yrs.
B. 22 yrs.–died of phthisis, often bled from slight wounds.	*G.* " " 43. Pneumonia.
C. 20 yrs.–not a bleeder.	*H.* Died, æt. $\frac{3}{12}$ yrs.
D. 26 yrs.–died of rheumatic fever–a bleeder.	*I.* Alive " 43. "
E. 43 yrs., alive–not a bleeder.	*J.* " " 47. "
	K. " " 39. " (mother of patient).

(Girls: No bleeders.)

K. Mother of Patient.

6 Children.

Boys.	Girls.
A. Died, 9 yrs, of scarlet fever; was in Gt. Ormond St., with hæmorrhage into knee-joint.	*C.* Died, $1\frac{7}{12}$ yrs. Not bleeders.
B. Died, æt. $1\frac{3}{12}$ yrs., of hæmorrhage following circumcision.	*D.* Alive, 4 yrs.
C. Died, æt. 9 yrs.–not a bleeder.	
D. Alive, $2\frac{5}{12}$ yrs.–the patient under Mr. Colley.	

In the father's family there were eight children, six of them being boys, and none of them were "bleeders." It does not descend from father to son. Thus we see there is no history of hæmophilia on the father's side, the transmission of the hæmorrhagic tendency being solely through the mother. This tendency of transmission through the mother is noted in some other congenital hereditary diseases, *e.g.*, pseudo-hypertrophic paralysis. Another point of interest to be noted is that the sons are not always affected, and their children do not inherit the disease, whereas the daughters are almost sure to transmit it to their children, and then often in an aggravated form.

In connection with the transmission of the disease Fagge narrates an interesting account of a certain village where hæmophilia was practically endemic, viz., at Tenna in the Grisons, where in 1855 the females of two families affected by the disease banded together, and decided not to marry. In 1879 there were no hæmophilics in the village. The mothers of bleeders generally have large families, *e.g.*, the mother of the boy whose case we have before us had 10, and that of the boy under Mr. Colley 11, whereas the average number in a family is about 5. We will now turn to the—

Course and symptoms of the disease as presented in the cases I have already narrated, or that I shall refer to later.

Age of onset.—These do not appear before the end of the first or second year, and, although the age at which they commence varies somewhat, a large proportion exhibit the hæmorrhagic tendency during childhood, and before ten years of age. The latest age at which I can find a case recorded as commencing is twenty-two years. The patient we have been reading of began before he was nine, the second case at two-and-a-half years, and so you will notice in most of the cases I shall bring before you to-day.

Joint-lesion.—Joint troubles, which are very prominent in some cases, do not often appear before the age of four to five.

Classes of cases.—When we come to look at the different cases, we find that they may be, more or less, divided up into two groups, viz., those in which the hæmorrhage is (1) spontaneous, or (2) traumatic.

How rare the disease is, is shown by the fact that there have only been two deaths in the hospital from 1870 to 1899 inclusive, and both of them were subsequent to operation.

Let us take Group (1).

In *Group* (1) the part played by traumatism is very difficult to estimate. A very slight injury, even pressure, may cause a serious lesion, *e.g.*, in the *Lancet*, 1894, vol. ii., p. 740, is recorded the case of a boy five years old, on whom even moderate hand pressure would produce ecchymosis. Another excellent example of the grave effect of slight traumatism is seen in a case recorded in the *Lancet* for 1898, vol. ii., p. 1474, in which a boy of thirteen developed a large swelling on the outer side of the thigh, which was said to have resulted from a sprain of his thigh on getting into bed. The boy had often had bleedings from the gums, and nose, and swellings of his joints, and had been an in-patient for severe hæmorrhage, the result of a pin prick in the roof of the mouth. Besides being a very marked case of the disease himself, his family history was a bad one, viz., fourteen in the family, seven of them males, and of these six had died of hæmorrhage.

Epistaxis.—Of the symptoms, epistaxis is by far the commonest, and of this the notes of a case in a young girl of ten years old who has been many times in the hospital give an interesting example. In women the disease is exceedingly rare, as I previously told you, and when it does occur it is not of so severe a type as in men. It is very rarely fatal, and the symptoms of it are commonly limited to bleeding from the nose to cutaneous ecchymoses or to menorrhagia.

M. M. The child was admitted under Dr. Goodhart in 1898, with epistaxis, subcutaneous hæmorrhages, and small hæmatomata in the neighbourhood of the shoulder, knee, and hip joints. Her mother suffers from severe floodings, and two uncles died of hæmorrhage. When eight years old the patient had pain in her joints and "severe bleeding" from a cut finger. Three months later epistaxis occurred, and again on admission. She was admitted five times in all to the hospital, usually with epistaxis and a purpuric rash on the body and legs, and some bruises. Her temperature was slightly raised. She was somewhat anæmic. The hæmorrhages were never of a serious nature.

Other symptoms.—The next most common situation from which bleeding occurs is the gums, and then the mouth. Later on, hæmorrhage may take place from the stomach, intestines, lungs, the genito-urinary organs, or, very rarely indeed, results in an oozing from the finger-tips and ears.

Hæmaturia.—At the onset of puberty, hæmaturia and bleeding from the intestine often replace, as it were, that from the nose and mouth.

Amount lost.—The amount of blood lost varies enormously in different cases, and at different times; some lose a large quantity at one time and less at others. Epistaxis, and other hæmorrhages, may be slight, as in the case I have told you of, or may be fatal. It is curious to note, however, that hæmaturia is very rarely followed by a fatal result.

Group (2). The *traumatic* cases are the most unfavourable of all as to prognosis.

Slight operations.—Death has resulted from leeching, from some such simple operations as

circumcision and division of the frænum linguæ. Indeed, mere scratches may be dangerous, and although vaccination is not usually so, even it may be. Extraction of teeth in these patients seems especially dangerous, as, *e.g.*, in the case of the boy I told you of who was bruised as a result of pressure by the hand. After extraction, severe hæmorrhage occurred at intervals for six days, and no styptics were of any value in checking the hæmorrhage.

Difference in bleeding tendency in families.—It is curious that this tendency to bleed severely as a result of injury seems to vary very much at different times and in the same patient, and in some families of "bleeders" the danger is much greater than in others.

More severe operations.—Incision of abscesses seems especially dangerous, and in this connection may be mentioned the case at present in Clinical, and also the only two fatal cases that have occurred in the hospital in thirty years, from 1870–1899 inclusive. One of these two was a boy, J. J., æt. 15, who was admitted in 1880, under Mr. Bryant. His leg became swollen and painful after a long walk. He was admitted into the hospital with what was thought to be a "pulpy knee," and it was treated by rest. Suddenly one day the leg became very swollen and appeared to be on the point of bursting. His temperature was 101°. The swelling was incised, and found full of blood-clot. The leg was amputated, but hæmorrhage in the form of slow oozing, continued, and the patient died.

The other patient was a man of 30, W. G. K., under Mr. Golding-Bird, in 1896. There was a fourteen days' history of stiffness and swelling of the right knee-joint, which was at first attributed to "rheumatism," as he had previously suffered from swellings of his joints.

Condition on admission.—He was thin and pale. The right knee was six and a quarter inches greater in circumference than the left. There was œdema extending down to the feet and up to the thigh, and the history states that the swelling had appeared very rapidly. Free incisions were made all round the joint, and pus and decomposed blood evacuated. After the operation, continuous slow oozing of blood took place, and twelve days later patient died. Both these patients were undoubtedly hæmophilics.

Blood tumours in muscles.—Now, although in both these cases there was hæmorrhage into the joints, there was hæmorrhage also into the external tissues, and sometimes the deeper structures are the seat of large tumours. A good example of such a case is recorded by Fagge, in a patient of Sir W. Jenner's, and it shows also what a severe result may be produced by a slight traumatism, *e.g.*, the fall of an india-rubber ball on to the thigh, which caused an extravasation of blood extending from the knee to the trochanter. In the case in Clinical the tumour was a large one.

The thigh is one of the most favourite seats of these tumours, as are also the false ribs or some part of the back. They are hot, painful, and tender to the touch. If left alone they generally disappear, but occasionally suppurate. If punctured, or incised, as I have already told you, they may be very dangerous.

Serous cavities.—Effusion into the serous cavities is very rare indeed, but the fact that it does sometimes occur is proved by the autopsy of Mr. Bryant's case, where Dr. Goodhart states that orange-coloured pigment from old hæmorrhage was present in some pleural adhesions on the right side.

Joint effusions.—In several of the cases I have mentioned to you effusions into the joints have been present. Indeed, in some hæmophilics it is the most striking feature of their condition. The knees are the joints most often attacked, after these the ankle, elbow, shoulder, and hip. The wrist, fingers, and toes are very seldom affected. Sometimes these effusions are the result of traumatism, often slight, or of some severe excitation.

The condition of the joints as to swelling, and pain, very closely simulates that of acute rheumatism; but, although by some authors the effusion has been thought to be serous, yet Mr. Bryant's case, the hip-joint from which I have brought from the Museum to show you, affords conclusive evidence that the effusion is due to blood. These swellings usually slowly subside, but are very apt to reappear at intervals of months, or perhaps years. Some of the patients are rarely free from

it, and may, indeed, become cripples, the joint surfaces being more or less destroyed.

Examples.—Of this class of case the following are very good examples:—

A group of three recorded in the *Lancet* for 1894, vol. i., p. 535—

1. Male, æt. 13, who had previously attended hospital for severe loss of blood from slight causes, developed an effusion into his left knee, and right hip, and also into the muscles of abdominal wall, as high as the umbilicus. Two months later he again had effusion into his right knee.

2. Male, æt. 11, who had recurrent effusions into his left knee, and hæmatomata elsewhere, the result of slight blows.

3. Male, æt. 14, who suffered from recurrent bleedings from the nose, and into the right knee-joint.

In Case 1 the family history embraced five generations, with a total of fifty-two lives, and affords an excellent example of the transmission of the condition through the female line. Six males died of hæmorrhage, and four were living who had shown well-marked evidence of the disease. The mother of the boy had married twice, and in each family had hæmophilic children.

Mental peculiarities.—Before leaving the description of the symptoms there is one which attention is drawn to by Mr. Dent in the *British Medical Journal* for 1898, and which, from the point of view of diagnosis, it is very important to remember. He says hæmophilics constantly show some mental peculiarities, the most common being an inability to speak the truth about their condition, despite their knowledge of its great importance. Indeed, they will absolutely deny it, even when the hæmorrhage is actually taking place. He narrates a case of a young fellow who refused to admit it, or even to tell them where his relatives lived. When the latter were found out by accident, the mother, on her arrival, said, "I know what has happened; my son has had his tooth taken out, and is bleeding to death," etc.

Morbid anatomy and pathology.—Of these there is little to say. In the fatal cases there is nothing noticeable except their extreme bloodlessness. The condition has been thought due to a defective power of coagulability of the blood; but that first poured out clots quite normally, and it is only after a great quantity has been lost that the blood does not clot at all, or very feebly. Apart from this the blood appears perfectly normal. The fatty changes noted in the heart are certainly secondary to the anæmia.

Another change that has been pointed out by some observers is a peculiar thinness and transparency of the vessels, but this is not confirmed by other observers. Indeed, Dr. Legg states that Dr. Klein could not detect microscopically any disease in the organs or tissues of several patients who died in St. Bartholomew's Hospital.

As to the changes in the joints, the effusion at first is reabsorbed. Later on, as the result of recurrence, the cartilage becomes stained a rusty colour, and becomes thinned. The absorption proceeding, fibrous ankylosis results, the cartilage remaining being thinned so that the bone is almost bared, changes very like those occurring in osteoarthritis.

The Prognosis is no longer so seriously regarded as it was formerly. Grandidier states that only 10 per cent. of the cases ever reach twenty-one years of age, but Dr. Legg, on the other hand, regards the prognosis as much more favourable than this, and states that many cases of bleeders reach adult life. It is said also that with middle age, the tendency to bleed may disappear. These patients are by no means always bloodless people. In the intervals of attacks they appear as healthy as anybody. The quantity that is lost is very great in some cases, *e.g.*, Fagge records a case in which after the extraction of a tooth, the patient lost half a gallon in less than twenty-four hours. The patients, however, usually take a very considerable time to recover from their bleeding, and Dr. Legg says in a severe case it may be as much as four to six months.

Diagnosis.—The most important points with regard to this, seem to me to be the differential diagnosis between hæmophilia and some of the much more common diseases, especially *acute rheumatism, acute necrosis, or suppurative arthritis, and tubercular joint* disease. On

looking back on our cases, we may see that one or other of these conditions was thought to be present in the case in Clinical, in Mr. Bryant's and Mr. Golding-Bird's cases. In many others, too, the diagnosis was made of some pyæmic condition, and as a result, operation was performed. The result was fatal in two of the cases, but fortunately the boy in the ward at the present time is slowly recovering, although until he is actually well we shall not be satisfied with him, as it is well known that the hæmorrhage has occurred again, even at the last minute, so to speak, before the actual healing is complete. If the skin were always discoloured in these cases it would not be so difficult, provided our observations were always carefully made, but unfortunately they are not always so.

Besides the examples I have already mentioned to you as errors under these heads there are two cases in the *British Medical Journal* for 1898, vol. i., p. 1135, which form excellent examples. One was a boy of seven years, who fell down, and injured his knee. He was admitted a week later to hospital with a hot, tense, and freely-fluctuating swelling of the joint. The condition was thought to be due to an acute synovitis. The temperature persisted for ten days. The second boy was admitted with what was thought to be a "pulpy knee." The difficulty of course arises in the fact that a patient comes up with an acute condition and we know nothing of his history. However, if you only remember how closely hæmophilia may simulate other much more common acute conditions you *may* be fortunate enough to recognise its probable existence, and withhold your hand for a time until you can make more certain of your diagnosis.

Other blood diseases.—With regard to the diagnosis from other blood conditions associated with joint troubles, such as some purpuric cases and scurvy, it is not so difficult. They are temporary hæmorrhagic diseases. Peliosis rheumatica (Schönlein's disease) generally occurs in adults of twenty to thirty, and in it the combination of purpura and joint pains is very characteristic. Hæmophilia, remember, is a congenital hereditary disease.

Again, a long-continued, or repeated hæmorrhage from, or into a single place must not be regarded as hæmophilic in the absence of the family history, and other evidences of hæmorrhages previously. A case in point is a man I remember who was under Mr. Symonds in Luke in 1889, and who is headed up in the surgical report as (?) hæmophilia. He was admitted with a sinus of an old empyæma, which had been opened seven months previously, and from which there had been at times considerable hæmorrhage. During, and after the operation, there was severe hæmorrhage; but the history states that previous to the present disease he had always been healthy, and that his father and mother, six brothers and one sister were all living and in good health.

Umbilical infantile hæmorrhage.—Another rare condition which may be confounded with hæmophilia is that of umbilical hæmorrhage in infants. They bleed profusely at the point of separation of the umbilical cord. But these cases occur in both sexes, and not especially in bleeder families, and, if they survive, no tendency to hæmorrhage is noted.

Ill-marked cases, especially women.—In the less-marked cases the diagnosis may be very difficult, and, especially in females, it cannot often be settled apart from the family history. Many women bleed very readily; some are subject to spontaneous hæmorrhages, while they are sometimes affected with "hæmatidrosis," in which blood comes from the mouth of the hair sacs and sweat glands. The most suspicious signs of the disease are petechiæ, epistaxis and joint troubles in a bleeder family, and especially uncontrollable hæmorrhage from slight wounds.

The treatment is decidedly unsatisfactory. Part of it, however, is obvious, such as that no surgical operation should be performed except under the most urgent circumstances. In almost all cases where any large surgical operation has been done the patient has bled to death.

Traumatic.—Hæmorrhages following injury must be dealt with on the usual lines, viz., plugging, firm bandaging, etc. Styptics are, however, worse than useless in most cases, and Dr. Legg says that the use of the hot iron,

or of perchloride of iron, is to be specially avoided.

Spontaneous.—Even in the spontaneous cases it can not be said that medicinal remedies are of much avail. They are often quite ineffectual, but ice may be used in epistaxis for plugging the nose with, or in the case of the intestine for plugging the rectum.

Transfusion. Freezing. Oxygen inhalation.—Transfusion has been tried with success in some very bad cases, and there are records of success from oxygen inhalation, and from freezing the bleeding surface, as, for instance, after extraction of a tooth.

Difficulty to determine effect of treatment.—In all cases, however, it is practically impossible to say whether the treatment has been of any real use, for when apparently all the blood has gone and the patient has been on the point of death, recovery has followed, the blood-flow having ceased. The same observations apply to treatment by means of drugs. At present chloride of calcium is the drug most in favour, from the power it is supposed to possess of increasing the coagulability of the blood.

The boy in Clinical was given—

Calc. Chloridi.	...	gr. x.
Ext. Ergotæ Liq.	...	♏ xx.
Liq. Ferri Perchlor.	...	♏ x.
Acidi Citrici	... ...	gr. v.
Aq. Chloroformi	...	ad ℥j. t.d.s. p.c.

In the treatment of the joints the limb should be kept as motionless as possible by plaster of Paris splints, and pain must be neutralized by opium.

Intervals.—In the intervals between the attacks careful instructions should be given as to the care of these patients. All persons connected with them should be informed of the condition, and of course they must be absolutely forbidden to play such games as cricket, football, hockey, fives, etc.

Warm clothing and a dry bracing air are of great importance to them, inasmuch as they are very apt to feel the cold greatly.

In the Medical Wards.

A. S., æt. 50. Admitted on 3rd April to Philip ward, under the care of Dr. Hale White, for "constipation."

Personal and medical history.—Patient had followed the occupation of house painter for the past six years, but for the last twelve months had not done much work. He had drunk, on an average, a quartern of rum and three pints of beer per diem. Until recently his bowels had acted regularly once a day.

History of present illness.—About a fortnight before admission patient began to feel slight griping pain in his abdomen, and to suffer from constipation. Since March 29th, his bowels had not been opened without enemata, the motions had been scanty, and were said to have contained blood and slime. He vomited on one occasion previous to admission, and his abdomen had become painful and somewhat distended, but there was no history of an acute attack of abdominal pain.

Condition on admission.—Patient complained of slight griping pain across the upper part of the abdomen. His tongue was dirty, and his breath offensive. The teeth were foul, and crusted with tartar, but no blue line could be detected on the gums. The abdomen was slightly distended, it moved well on respiration, no peristalsis was visible, and no tumour could be felt on palpation, nor was the tenderness localised. No stenosis of the rectum, or tumour could be detected on rectal examination, there was no blood or slime in the rectum. Lead was not found present in the urine. The arteries were atheromatous; pulse regular, beating 84 per minute, and of fairly high tension.

It was thought that the patient might be suffering from "lead colic," and he was put on milk diet, and treated with copious enemata with practically no result. On the 7th, patient complained of slight pain, and the abdomen seemed more tense, but there was no vomiting. As the pulse had been rising since the previous evening, intestinal obstruction due to growth was suspected, and it was decided to perform a laparotomy. While preparations were being made for the operation, patient passed a small fluid motion, and then fell back in a collapsed condition, and died rapidly within a quarter of an hour.

At the autopsy.—There was slight atheroma of the aorta, and aortic valve, but no other cardiac lesion, and no pulmonary embolism. The lungs were normal. The large intestine was extremely distended, and a small localised abscess was found on the right side, its walls consisting of colon and omentum. At this point there was a perforation of the transverse colon, which was apparently of about ten days' standing, as its edges were thickened, and the surrounding adhesions dense. There was no general peritonitis; the mucous membrane of the colon presented numerous, and large, transverse ulcers, from one and a half to two inches in length, and in the base of one of these the perforation had occurred; this ulceration appeared to have existed for about a fortnight

A small annular growth was found in the rectum, at about the level of the pelvic brim. No secondary deposits were found.

The chief points of interest in the case appear to be its short history, the absence of an acute attack of pain on the date of perforation of the intestine, the fact that there was no localised tenderness in the abdomen, and that there was only one slight attack of vomiting.

In the Surgical Wards.

A CASE OF ABDOMINAL TUMOUR OPERATED ON BY MR. LANE.

Abstract of Report.—Lazarus 3.—Q. P., æt. 23. Admitted for a swelling in the right side of abdomen. Neither the patient's family history, nor his previous history are of importance.

Present illness.—Three weeks before admission, patient noticed "a feeling of fulness of the stomach, as if his food did not go down properly." He was treated by a doctor without examination, and two weeks later patient himself noticed a swelling in the upper part of his abdomen. He has had no actual pain, only slight discomfort. There has been no sickness, and his bowels have always been regular.

Condition on admission.—The patient was a poorly-developed, but healthy-looking man. On examination of his abdomen, a distinct bulging was seen in the right hypochondrium. On palpation, a tense tumour, evidently containing fluid, could be made out on the right side, extending from the costal margin nearly to the umbilicus, being above apparently continuous with the liver. Towards the right side the swelling decreased in its vertical extent, but appeared to extend into the upper part of the loin. The tumour was quite dull on percussion, and no band of resonance could be made out in front of it. An unmistakable thrill could be felt, and this could be detected at a point posterior to the mid-axillary line. There was a questionable "hydatid thrill." The urine was normal. There was no evidence of disease elsewhere. The liver dulness commenced on the sixth rib, so the case was one of a cyst, situated in the upper part of the abdomen, being apparently continuous to the liver, and extending further transversely than in the vertical direction. A diagnosis of hydatid cyst of the liver was made.

Mr. Lane made an incision to the right of the middle line, and it was at once evident that the cyst had no connection with the liver. The patient was turned on the side, and the usual kidney incision was made in the loin; the cyst was opened, and about two pints of dark brown fluid escaped. The fluid resembled that usually obtained from a pancreatic cyst. The diagnosis now lay between hydronephrosis and pancreatic cyst. An examination of the cyst wall threw no light on the question, and no smell of urine could be detected. On further examination, a second cyst was found, and opened through the wall of the larger cyst, it contained similar fluid to that obtained from the first. A search was now made for the right kidney, which could not be found. The fluid was sent to the chemical department, but as yet no report has been returned. The cysts were packed with gauze, and allowed to drain through the loin. The patient is making an uneventful recovery, and large quantities of urine are being daily passed per loin, so that the case was really one of hydronephrosis.

The interest in the case depends upon the high, and transverse position of the tumour, and the manner in which it extended forwards rather than into the loin. The absence of the right kidney, and the passage of urine into the dressings, confirm the diagnosis made at the operation.

Pityriasis Rubra.

By L. A. Parry.

I was recently asked to see an old lady of 72, who was said to be suffering from some form of skin disease. I found she had a patch of squamous dermatitis on the dorsum of the right foot, the skin of the rest of the body being healthy. This rapidly spread, so that in the course of about ten days the whole of the surface of the body, without exception, was covered with a dry scaly eruption, presenting all the features of a general exfoliative dermatitis (pityriasis rubra), *i.e.*, a red and dry skin, which desquamated in large and copious flakes, and which affected the whole of the epidermis. She gradually became weaker and weaker, diarrhœa set in, and death ensued in about three weeks.

The preceding very brief notes of a case suggest several points of interest:—

(1.) The fatal termination.—Students, and even practitioners are apt to ridicule the idea of death from a disease of the skin, but in the case of the affection under discussion, I should say the rule was death, recovery the exception. I only remember seeing three cases of this disease, the one mentioned above, with a fatal ending, a second case in an old lady, which terminated in death from exhaustion, and a third case (under Dr. Pitt's care) which developed chronic peritonitis, and of the ending of which I am ignorant. I remember Dr. Pitt pointing out to his clerks when discussing this case, the fact that the prognosis was always grave. The patients either died from exhaustion, or some other disease carried them off, and this is the experience of all dermatologists. These three cases happened by chance to be all female, but this is not the rule. If a large series be taken the proportion is two males to one female.

(2.) The nature of the affection.—Is it a primary skin disease, or is it only secondary to some antecedent chronic skin disease? Some dermatologists hold the one view, some the other, but the tendency among the most modern skin specialists, is to regard some cases as coming

under the one head, some under the other. The first category (in which must be included the example described above) comprises the cases of definite primary skin disease; whilst the remaining cases must be classed as secondary to some foregoing skin disease. These antecedent diseases are eczema, psoriasis, lichen ruber planus, erythema multiforme, erysipelas and pityriasis rubra pilaris. The primary disease loses its proper character when it becomes universal, and takes on the characters of pityriasis rubra mentioned above.

(3.) Allied affections.—Among these must be included epidemic dermatitis, such as occurred in a large London infirmary a few years ago; relapsing scarlatiniform erythema, pemphigus foliaceus, epidermolysis bullosa, and icthyosis. It will readily be seen that a good deal of care is necessary before making a diagnosis of a scaly skin eruption.

(4.) Treatment. This is not very satisfactory.—It is essential that the patient should be kept in bed, otherwise it will be impossible to properly apply the local applications, which are all important. Stephen Mackenzie recommends the following plan (for fuller details see Allbut's System, Vol. viii., p. 545.) A pyjama suit is made of lint, and a mask for the head and face, and this is to be kept constantly moist with a lotion composed as follows:—

Glyc. Plumb Subac.	...		...	ʒi.
Glycerin	...	...	...	ʒi.
Aq. ad	...	...	...	Oi.

This treatment is to be kept up till the hyperæmia diminishes, and then some greasy application such as equal parts of lanoline and vaseline is to be applied. Internal medication is unimportant. The greatest care should be taken to avoid any risk of chill. Even with the greatest care in treatment, the result is unfortunately very frequently disappointing.

Hove, Sussex.

Nursing News.

Matron's Office.

On Saturday, April 6th, Nurse Lamb left the hospital on completion of her three years' training.

On Thursday, April 9th, Nurse Morrah left the hospital having completed her three years' training. Nurse M. Cooper has been appointed to succeed her as Head Nurse in Charity ward.

Probationer Spalding has been appointed to succeed Nurse Cooper as Head Nurse in the Out-patient Department.

Nurse Mallandaine has been transferred to the Eye-wards, and Probationer Whittingham has been appointed to succeed her as Head Nurse in Mary ward.

In Quest of Gold.

(From our Special Correspondent in West Africa.)

The last letter that I sent you dealt, I believe, with bush travelling. Since then a number of incidents have occurred which may be of interest in the telling and may not. That is a matter for you to decide. Keeping a strict chronological sequence, the first item would be a visit to a neighbouring gold mine. Possibly your ideas of a gold mine include, as mine did, deep caverns filled with glittering gold, hugh rock-like nuggets, breast-high heaps of yellow "dust," iron-bound boxes guarded by black-bearded giants, revolver in hand—indeed all the paraphernalia of a Surrey drama. My expectations were not realized, as you may imagine. What I did really see I will tell you.

First of all came a twenty-mile tramp through country that made a hammock an excrescence; this occupied us the best part of the day, or to be exact, from 7 a.m. till 3.30 p.m., with intervals for chop, and an occasional palaver with chiefs, and kings, and other trash. The sun was getting near the brim of my smasher when our procession swung into the village of Bibianaha, where the mining staff has its quarters. As we came into view, I saw the engineer heave himself out of his easy chair, and rise with the extended hand, and welcoming smile of true hospitality that is one of the best features of this country. I had met him before, so his greeting was even more cordial, but to a perfect stranger, as I instanced at the Bokitsi mine, on the road up from the coast, the welcome is true and whole-hearted. Naturally after a twenty-mile tramp the inner man is the first consideration, and I should like to here express the opinion of every coaster that the man who invented "Sparklets" is a public benefactor, and, with the Worcestershire nobleman with the original recipe, worthy of a statue at Cape Coast or Accra. All this, you will suggest, has nothing to do with gold mines; that is just where you err. The whole secret of life in this climate lies in your chop-box. At home we take a man's temperature and feel his pulse. Out here you might diagnose, or rather prognose, his prospects of happiness by an inspection of his chop-box. I am glad to say that my prognosis, after dinner that night, was most favourable. Now that we have settled that little difficulty we will proceed with the subject. But perhaps, if you will allow me, I will endeavour to explain the present situation of these mines with regard to recent events. All of these West African mines owe their origin in the first place to native cupidity. For many years the inhabitants of gold-bearing areas—and it is difficult to find an area where gold-bearing quartz is *not* found—have crushed and washed quartz for the payment of the annual tribute to the chief. Obviously the means employed for the procuring of the quartz, and subsequently the gold, are crude in the extreme, and the native workings are placed in the most convenient, not in the most productive spots. The advent of the white man opens up enormous possibilities

of ease and luxury to the landlord, or chief of the country, and he barters for so much down, and so much a year rent, the exclusive mining and timber rights of so many square miles of his property. Then the ground is thoroughly prospected, every reef gauged, and every outcrop sampled. Finally, after the usual City business, the mine proper is formed, and work in earnest commences.

This, roughly, is the history of the Bibiani Mine, with one or two important additions. The borders of Ashanti lie close to the mine, and during the recent "disturbance," as the papers euphemistically termed it, the engineer and staff found it healthier to clear for the coast "one time," and leave the place to the tender mercies of the Ashanti and his friends. Consequently, when we arrived, a week or so after the return of the staff, we saw little save chaos at the first glance, though a more particular investigation showed that the steady march of ordered labour was once again restoring civilization to Bibianaha. The Ashanti rising was sunshine to the villagers, and they made hay. They stole the buckets, looted the rich red copper from the "stamps," and played hell with the mining plant generally. They also took the opportunity afforded by lack of overseers of crushing and partially washing some tons of the very best quartz. Also they built up their huts on the nice clear spaces made under the orders of the mining staff. Finally they succeeded in introducing small-pox into the village, and then they were completely happy. The next act saw the arrival of the miners on the scene. Having with them a man of power, with a Government certificate in surveying, no time was lost in putting things on a firm basis. The interlopers were served with notice to quit within three days, spare huts being allotted them outside the working area. The village was then raided, and much loot, including quantities of crushed quartz, recovered. The next day saw an unfortunate and disastrous fire, in which the whole of the offending dwellings were burnt to the ground.

"I'm glad you have brought your revolver," said the engineer, "for I expect we shall have some trouble to-night. They tried to fire my house last night, but I got out in time with my Winchester, and they gave it up. They may try it on again to-night." However, they didn't. I expect they realised that isolated resistance was useless, and no doubt the reinforcements of the afternoon had a great moral effect. The mere sight of your correspondent, disguised as a stage villain, would strike awe into any average nigger, and the bellicose swagger of my boy, with a Lee-Enfield carried upside down on his shoulder, produced cold shudders in all observers.

Just outside the white quarters I noticed a heap of grey stone in powder, not unlike cement. "That," said my guide, with a look of supreme content on his face, "that is selected quartz, found in those huts we burnt, and I estimate that there is quite forty tons there. That means six or eight hundred pounds in gold, and we haven't finished finding it yet." Here, then, was something tangible—something to think about and gloat over; but try as I could, I failed to arouse the faintest enthusiasm over that dust-heap. Had I not seen far nobler collections of building materials in the new works at Guy's? "Let us pass on," I said, and the procession got under weigh once more. Where were the pebbly nuggets? Where the armour-plated boxes that I dreamed of? "This," said my guide with an air of proprietorship, "is No. 1 adit." I looked, and saw a tunnel eating into the face of a bush-covered hill. As we watched, the muffled sound of picks ceased, and a hoarse cry of warning issued from the adit's mouth. My guide seemed disposed to move, and I eagerly followed him. We halted behind a convenient boulder and waited for, to me, an almost interminable time; then there was a dull roar, followed by a crushing, grinding noise, which gradually died away. "Blasting," said my informant, laconically.

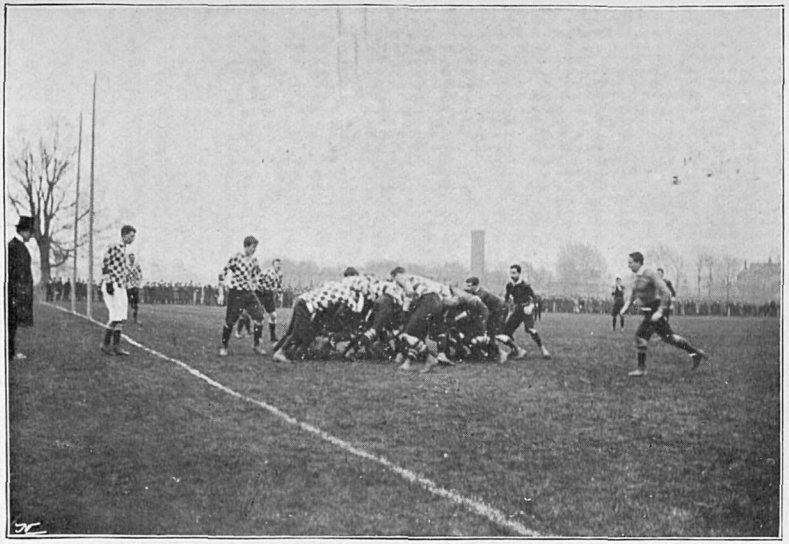
We travelled round, and then came an incident that was entirely unrehearsed. In taking a short cut through a bit of bush we stumbled on what at the first glance looked like a corpse, stretched out naked beside the dying embers of a fire. It moved slightly at our approach and we then saw in the dusk, that it was a man covered from head to foot with pocks, and placed there by the kindly care of the villagers without shelter, water or food. They trusted that morning would find the man in reality a corpse. However, the god from the machine, played, for that occasion only, by the manager, intervened. The man's brother was found, threatened with horrible punishments, and induced to take some little interest in his relative. When I left next morning he was still alive, but of his subsequent fate I know nothing. There is a strong belief, based on a large amount of experience, that white men do not take small-pox from natives. Whether the virulence of the disease is low, and easily within the scope of our vaccine-due immunity, or whether the care which the white takes to prevent the near approach of any native is the reason for this condition I do not know. Perhaps you can tell me.

We had finished our round of the mines and were sitting in hammock-chairs outside the house, watching the pale southern cross as it twinkled feebly low down in the sky. A dark form loomed up out of the blackness. "Chop ready, Sah." I heaved a sigh of relief.

Papers by Guy's Men.

An Address on some clinical aspects of Chronic Bright's Disease. By Alfred G. Barrs, M.D., F.R.C.P.—*British Medical Journal*, March 30th.

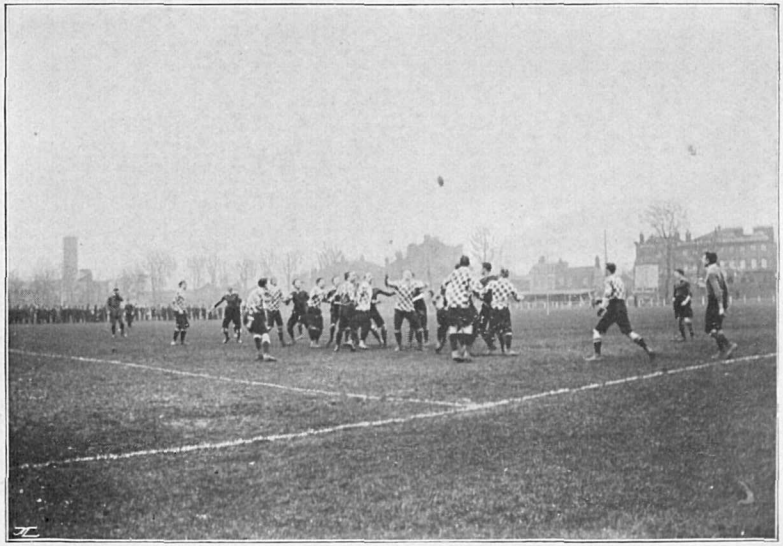
A Clinical Lecture on Acute Intussusception. By Francis J. Steward, M.S.—*The Clinical Journal*, April 10th.



London's Lines in Danger.

The Second Try.—Morgan gets there.

A Tight "Scrum."



Wetherell Throws In.

THE FINAL TIE FOR THE RUGGER CUP. Guy's v. London.

Passim.

"Another Scandal at Guy's Hospital" is a head-line which appears to appeal so much to the imagination of the representatives of certain newspapers, that they feel that any examination of facts is unnecessary. A grain of truth is disguised with a bushel of misrepresentation, and the general public is treated to the profound dogma of the callow L.S.A., embellished with the rhetoric of the juror whose vapouring is often not independent of stimulant, and whose capability is well shown by the verdict of "acshidental murder," which was not long ago returned by twelve good men and true. Why are we so often the victims of this stigma, which is as harmful to the interests of the hospital as it is painful to ourselves, and our friends? No one believes that the interests of the patient are entrusted to any less capable hands at our hospital than at others—the front surgery patient is attended to by the same men who are responsible for his welfare in the wards, and one seldom hears of even the most trivial complaint from in-patients. The authorities spare no pains in attempting to insure against bad work, and to detect and punish the evil-doer when anything more than a mare's nest is discovered; but the result of such research seldom reaches the public eye. We are, for the most part, so confident of our own innocence, that we neglect to answer to the indictment of the Press—we are so little anxious to parade our good works before men, that we accept in silence their blame, though often unmerited. This is not right. We owe it to ourselves, and to our hospital, to openly clear ourselves when able, and should be no less ready to justify ourselves than we are to submit to public criticism.

There are two sides to every question, except to the real scandal, and it is that other side which the intelligent part of the public wishes to hear. It would often be forthcoming if there were more mutual courtesy between ourselves and the copy-hunting journalist. Of course, we do not suggest that the Superintendent is to submit to cross-examination by every reporter who waylays him, any more than that the porter is to answer on the telephone enquiries from the same sources; but if the man on duty in the front surgery were approached, he often could—and we think he would—explain the whole matter, and so make less frequent accusations which are as unfair as they are unwarranted. Perhaps, however, such a line of action would not be so satisfactory for the circulation of the newspapers concerned.

When, at a further enquiry, the hospital is represented, and new facts are elicited, or old misrepresentations are exposed, there are, apparently, two ways by which the enterprising journalist may effect a retirement. Either "Scandal" is prefixed by "alleged," and the evidence to be reported is carefully selected, or else a question which previously demanded a column, and a glaring head-line, is relegated to an obscure corner of the sheet, and in an inch of small print the institution so unfairly attacked is exonerated from all blame.

The heartiest congratulations of all Guy's men, past and present, are due to Mr. Fripp on his appointment as Honorary Surgeon in Ordinary to His Majesty the King. Mr. Fripp has been so closely associated with the efforts which have of late been made to put the hospital on a sounder financial basis—he has laboured so untiringly for the welfare and reputation of his alma mater, both in England, and South Africa, that we feel this last and signal mark of royal favour is well merited. We believe that it was owing to him in no small degree that His Majesty first accepted the presidency of this hospital, and so greatly assisted us in our re-endowment scheme. We are glad, then, that his services have received recognition, and feel that in the honour paid him his hospital is honoured also.

Two other Guy's men find a place in the Royal Household—Mr. Bryant and Dr. Alan Manby. The last-named is at present accompanying the Duke and Duchess of York and Cornwall in their visit to the outlying parts of the empire.

Where are we to send our convalescents? The House-Surgeons have to face a new difficulty unless they can arrange for their patients to be sent to Homburg, Nice, or other eligible health resorts. We hear that one of our Sisters, who had, after some trouble, dispatched two female patients to a home of which we have always had the most favourable accounts, was astounded by their reappearance on the following day. On enquiry, their grievances seemed to be that they did not like the way the food was served to them, thought the bedrooms should be warmed, but, "anyhow could not enjoy themselves in the society they found there, not having been used to associating with persons of that class;" patients from the London Hospital forsooth, who hailed from Whitechapel. Of course the whole matter is explained by the fact that one lady describes herself as a "Court dressmaker." What else could one expect? At any rate it speaks well for the tone of our wards that this august personage had found nothing to complain of during her residence at the hospital.

Whatever hard things may be said of our men in the Front Surgery, we hear nothing but good of the externs, who at times vary their work with a little general practice. The patient was a midwife, a skilled woman much sought after, full of years and bronchitis. She informed the extern that she had been under Dr. Pitt, and Dr. Shaw for her cough. She had also endured much at the hands of "'ead physician 'Orrocks," while, when under the care of "Dr. 'Ilton Fagge, in St. Critical ward," she had passed a huge stone; all she wanted on the present occasion was something to loosen the phlegm on her chest. Nothing daunted at being associated with such illustrious colleagues as those already mentioned, the budding physician prescribed "Mist. Scillæ Ammoniata, ℥j. t.d.s." As she regarded the Guy's slip with critical interest, the ancient dame's face became illumined with confidence and admiration. "Ah, doctor," she said, "I see you knows *all* about it, that there 'Mist' 'as been put inter all my medicines, and it does me a power of good." The extern went his way rejoicing in the knowledge that he had worthily upheld the honour of his craft, and hospital.

The *Polyclinic* for March contains an interesting article on Clinical Museums in Hospitals. It is a plea for more direct appeal to the eye as being the best way to fix on the memory what enters by the ear. This is, to some extent, practised when lantern slides and diagrams are produced in the lecture theatre; the writer, however, advocates a collection of portraits of diseases in their various forms and stages, so that the student's knowledge of a single case in the wards may be amplified by comparison with past records. There are stowed away in portfolios, and locked up in drawers, collections of drawings of the greatest value, whose mere existence is often known only to the curator or librarian. Why should they not be permanently displayed in close juxtaposition with the wards. We have all profited by the presence of Mr. Towne's models in the museum, might we not derive equal benefit from the invaluable collection of drawings by Hurst, which are all hidden away, or only produced by a zealous lecturer at long intervals, to be immediately afterwards whisked away by their equally zealous custodians?

We have received and perused with interest a paper on "University Agitations in Russia," which was read by Miss Tchaykovsky before the Bedford College Students' meeting on Thursday, March 21st. The writer ascribes all the trouble between the students and the Government to the fact that the latter refuses to permit of meetings of any kind on the part of the former. One can hardly realise what would happen if our own student life were subject to a similar ban. No clubs whatever, either literary or athletic! No means of giving vent to that superfluous energy which, without some such safety valve, makes an explosion inevitable. The explosion has come in Russia, and, however much one may deplore the course it takes, one cannot but sympathize with the victims of its result.

We are so comfortable and happy in our liberties that we are apt to remain unmoved by the struggles, and disabilities of others, but the wish of the Russian student to have some share in the working out of his own salvation must appeal to us, and our only surprise is that, considering the fact that all the Government officials are drawn from the University students, there is none of that blending of the student with the official which would allow of a common meeting ground for compromise instead of the rigid line of demarcation between earnest appeal on the one side, and unyielding refusal on the other.

Easter Monday found all the male wards redolent with the fragrance of tobacco, and illuminated by the contented smiles of the devotees to the shrine of St. Nicotine. The only unhappy visage we saw belonged to a house-physician, who had had the misfortune to lose his pipe, and subsequently found the cherished briar-root in the mouth of a patient who was suffering from a throat affection, and had been by his orders missed out during the distribution of pipes and tobacco.

We are compelled to postpone until a future occasion the publication of the list of cases completing the paper on the Treatment of Uræmia, which Mr. H. S. French read before the Physical Society, and for which he was awarded the Treasurer's Prize.

We congratulate the Anatomy and Physiology Teaching Staff on a most satisfactory pass list for the March Second Conjoint Examination, which is published elsewhere. Seventeen candidates went up, and the close of the examination found the same number of men highly pleased with themselves. We do not know if this is a record in numbers, but 100 per cent. of passes is hard to beat.

We are glad to note that the Goldsmiths' Company has made a grant of £2,000 towards the special requirements of the hospital, which include a building fund of £180,000.

Messrs. C. H. Fagge and A. W. Ormond have both gone to fresh fields and pastures new in their special departments of ears, and eyes respectively. The continental schools claim to be very up to date in these matters, but we feel confident that what our two representatives do not find out will not be worth knowing. We wish them both a profitable and pleasant time.

During Mr. Ormond's absence the duties of Secretary to the Student's Club, a post which is no sinecure, will be performed by F. G. Cross, the Assistant Secretary.

The Committee of the Student's Club has for a long time cast envious eyes at the electric light fittings which are gradually becoming general in the hospital. The advantages of electricity, as compared with gas, from the points of view of comfort and hygiene, especially as regards the smoking-room, are so patent, that a sub-committee was appointed to consider the feasibility of a scheme for its installation. It was hoped that some arrangement could be come to by which the club could be supplied from the hospital dynamo, instead of being dependent on public electric-lighting companies. It was found, however, that the installation of electric light throughout the hospital would have to be completed before the club could be supplied; the scheme has, therefore, been pigeonholed for the present, but we feel sure that the denizens of the smoking-room during the winter months will pray for its ultimate accomplishment.

We publish with this number four photographs which represent the "bag" of Mr. J. F. Douse, who, among other snapshooters, was conspicuous at Richmond on the occasion of the final Rugby Cup tie. The photographs suffer slightly in the process of reproduction, for the originals are very sharp, faces being clearly distinguishable. Mr. Douse has been happy in securing typical incidents in the Rugby game, No. II. especially representing the successful culmination of a good piece of play. We can imagine no better corrective to "wingers" and

"shirkers" than the knowledge that their evil deeds may be perpetuated by such snapshots, and the club captains might do worse than appoint a special photographer to attend matches for such a purpose during the season.

We should like to call the attention of Guy's men, more especially those still working at the hospital, to the fact that the South African Memorial Fund, though growing, does so but slowly. There must still be many men who wish to contribute to the fund, as there is scarcely one of us who has not lost some old pal, whose memory must be kept green. Of course the memorial can hardly take shape until the war be at an end, but it will be easier to decide on that shape when we know what funds can be devoted to the purpose.

Elsewhere we publish the reports of the secretaries of the Rugby and Association Football Clubs. Both have had very successful seasons, although the "Soccer" team just failed to bring home the Inter-Hospital Cup. It is satisfactory to learn that the hospital has been able to run seven teams, as it is only by constant attention to the junior teams that we can hope to maintain the standard of our Cup teams. There were very good attendances at the Cup games this year as far as Guy's was concerned; the Staff were always well represented, while the Nursing Staff showed more keenness than we have noticed on their part for some years.

It is pleasant to hear of the doings of old friends, and a budget from Pretoria tells of the whereabouts of some of whom we have heard very little for some time. Mullins, the writer, managed to get two days' leave from Cape Town, so was able to pay a fleeting visit to his home at Port Elizabeth. On his journey to Pretoria he saw F. E. Walker at Vredeport. Of "Freddy" he writes: "He has a huge moustache, which covers his mouth, and has only half a tooth left, but looks very fit." Barrow, whom he met in Cape Town, "says that he was shut up in Christiana, and so, with some eight other men, hired thirty blacks and went diamond digging in the river. After paying all exes. they cleared £37 each."

K. B. Alexander was in Pretoria going very strong. "He is as keen as ever—hockey one day, cricket the next, soccer the next." He also says that "Alec has developed into a champion liar"—but we will not publish the Munchausen-like anecdotes which have gained K. B. this reputation. Both Alexander and Walker had signed on for another three months' duty, so were not likely to get away before the end of March.

Sister Tippetts, too, was in Pretoria, at No. 2 Hospital, and was apparently more than maintaining the reputation of our Nursing Staff.

Dr. Washbourn, the sole survivor of the Yeomanry Hospital Staff at Deelfontein, is in charge of the medical side of the Pretoria Yeomanry Hospital. Our correspondent says that he is very well, and full of energy.

Mr. S. T. Reid, who has been awarded the Golding-Bird Medal and Scholarship in Sanitary Science, is Surgeon on H.M.S. *Gleaner*. He was a student at Charing Cross Hospital, but has, of late, been taking the D.P.H. course at this hospital, and may be considered to have joined the brotherhood of Guy's.

Notice.

PRIZE EXAMINATIONS, 1901.

The Golding-Bird Gold Medal and Scholarship in Sanitary Science has been awarded to Mr. S. T. Reid.

The Junior Prizes for General Proficiency (1900–1901) have been awarded as under.—First Prize, £20, Mr. J. H. Clatworthy. Second Prize, £15, Mr. H. F. Bell Walker. Third Prize, £10, Mr. G. Russell. Certificate, Mr. H. H. Carter.

The Michael Harris Prize in Anatomy has been awarded to Mr. J. H. Clatworthy.

The Sands-Cox Scholarship in Physiology has been awarded to Mr. H. F. Bell Walker, and Certificates to Mr. J. H. Clatworthy and Mr. G. Russell.

Guy's Hospital Debating Society.

LADIES' NIGHT.

The annual ladies' night of the Debating Society was held on Saturday, March 16th, in the Court Room. There was a very large attendance, amounting to over 150 people, and considering how well the fairer sex was represented in numbers, it was rather disappointing that only one was found bold enough to rise to her feet, in spite of repeated appeals from the chair, and from those taking part in the debate. The meeting was, however, a thorough success. Many excellent speeches were made, and even those who preferred to take the more passive part of listeners, gave every evidence of following the debate with much interest and amusement. Dr. Pavy, the President of the Society, took the chair at 8 p.m., and after the minutes of the previous meeting had been read by the Secretary, Mr. Wacher was called upon to move "That in the opinion of this House the influence of women is essential to man's success."

Mr. Wacher, in proposing this motion, made a speech which was more remarkable for persuasive eloquence than for wealth of argument. Taking his hearers into the land of poetry, painting, music and romance, he maintained that woman was the idealising factor, the source of inspiration in them all, while chivalry, one of man's highest virtues, could have no existence without woman. He dealt freely in epigrams and epithets, and mingled mirth and pathos in the most bewildering manner. His speech concluded with a touching description of domestic bliss, which almost drew the unbidden tear.

Mr. Gibson, in opposing the motion, endeavoured to impress his hearers with the solemnity of the question before the house. He felt that he would probably be regarded by the ladies as an iconoclastic monster, by the younger men he would be treated with pitying scorn or open derision, but by the more experienced and married men that pity would be tinged with approval. He wished, however, to dissociate himself from any attacks on the opposite sex, he merely held a brief for the defence of man. Men were more than mere puppets, dependent for their activity on the stimulus of a woman's mind, again to become motionless after a few convulsive kicks, when the feminine influence is withdrawn. An appeal to history showed that the best works of man, whether in art, science, or politics, or war, were done by those free from the trammels of feminine influence. Mr. Gibson was very earnest on the question, for he had a personal grievance. Had not his own success in life been marred by his being an only boy in a family of eight sisters, and by a hopeless love affair at the age of fifteen?

Mr. Wales, in supporting the motion, indulged in the most fulsome flattery of the ladies, after disclaiming any intention to win their hearts by any exaggeration of their virtues.

Mr. Kelsy then supported Mr. Gibson in the wittiest speech of the evening. He at first characterized the opener of the debate as the hero of the lady's novelette, and then proceeded to describe him in detail: "A man who in his bearing towards men is cool even to insolence, and towards women chivalrous almost to devotion, etc." He had listened to Mr. Wacher's receipt for success with intentness, for he too was ambitious, but hitherto had thought it depended upon his own efforts. What was this high road to success? The simplicity almost unmanned him—"Submit to be loved by a woman, and she does the rest!" Determination, will-power, must not be developed, for they would lead to ructions and failure; reason and thought are unnecessary, for a woman *knows*, she never *reasons*. In fact it was assumed by Mr. Wacher that woman with her caprice, her loquacity, her artfulness, her tact, and all her other social qualities, is *essential* for man's success, and possibly a little knowledge of one's profession *may* prove useful. Mothers would certainly be against the motion, for they never think the influence of woman, however young, at all essential to their sons' success. In conclusion, he said the honourable opener had given them a receipt for a dish called success, a kind of *entrée au succès*, depending mainly on a condiment, woman! What was this condiment or sauce? Was it the sauce O.K.? or the sauce A 1? or was it the sauce Tartare? He begged one to pause before taking that step from which there is no way out but by death or divorce, when it is discovered too late that this condiment, Woman, is not the sauce A 1, not the sauce O.K., but is the sauce Tartare.

Mr. Penny made an excellent speech, in which he attacked Mr. Gibson with much sarcasm and uncomplimentary epithets for the ungallant position he had taken up, and warned him as to the treatment he might expect in the future from those of the opposite sex among whom he might be compelled to work during the next few months.

Mr. Kitchen, in opposing the motion, tried to impress the House with the strenuous endeavours he was making to be witty.

Mr. Stamm thought woman's influence was an important factor in the doings of men, both passively and actively, and suggested that the excellence of the speeches hitherto made that evening was a testimony to the inspiring influence of woman's presence.

Mr. Collins Lewis occupied most of his time with an unprovoked attack on Mr. Stamm.

A clergyman then spoke against the motion, and appealed to the ladies to prove their influence by taking part in the debate.

This appeal was responded to by one lady, who maintained that women exercised at least some influence on the doings of men in public opinion.

Others who took part in the debate were Dr. Spriggs, Mr. A. R. Thompson, and Mr. W. C. C. Pakes.

Mr. Gibson and Mr. Wacher then replied.

The motion was eventually lost.

The proceedings terminated with a vote of thanks to Dr. Pavy, the Chairman.

For the motion	...	...	39
Against	...	...	60
Majority	...		21

Reviews.

The price of books submitted for review should in every case be stated.

Diseases of the Anus and Rectum. By D. H. Goodsall, F.R.C.S., and W. E. Miles, F.R.C.S. In 2 vols. (Longmans, Green & Co.) Price 7s. 6d. Vol. I.

The first volume deals in its 300 pages with the anatomy, general diagnosis, ischio-rectal abscesses, fistula, fissure, and hæmorrhoids. If all the other diseases are to be dealt with on the same scale, vol. ii. must be a much larger work. In this book, for which as a *raison d'être* it is urged that the work is a result of personal experience, 38 pages are devoted to anatomy. Though this chapter is quite sound, and moderately complete, there is nothing to be found in it which one cannot find in all the good anatomy books, and this chapter has one great fault, that all reference to development is omitted. We cannot help thinking that a concise *resumé* of this question would be of excellent use to operating surgeons in refreshing their minds on the mode of causation of congenital defects.

The chapter on general diagnosis is, on the whole, sound, if elementary. The writers state that in order to distinguish between the various anal protrusions "an actual inspection should be made whenever possible." This was a very gentle statement, as a book like this cannot insist too strongly on such essentials in diagnosis as a complete examination. Again, we read under the heading of "examination of the rectum," of placing "soap beneath the nails." We had thought that beneath the nail of the twentieth century surgeon there was no resting-place for soap. In this chapter we find no suggestion as to the necessity of abdominal examination combined with rectal, or as to what one would derive from it, a most lamentable omission.

Further, there is no suggestion that a systematic examination of the chest is necessary in all cases of fistula, though in the chapter on this disease, the association of tuberculosis of the lung with fistula is ably dealt with (including a statistical inquiry by Dr. Hugh Walsham, with skiagrams), and the advisability of operation discussed, we are glad to say, with a positive answer.

One is much disappointed to find no account of any congenital malformation, even in dealing with recto-vaginal fistula. No reason for this is given. Are these not diseases of the rectum?

However, the chapters on abscess, fistulas, and fissure, amounting together to almost 200 pages, are the best in the book, if decidedly long drawn out, though in parts sketchy.

The last chapter deals with hæmorrhoids, and has many of the characteristics of the earlier chapters, two or three points especially strike us for comment:—In the etiology of hæmorrhoids we find no opinion as to their association with hepatic cirrhosis, and no suggestion that they may be symptomatic of rectal carcinoma. After reading this work, a student would on finding hæmorrhoids probably be quite content, and miss the growth occasionally found above. Secondly, when locating internal hæmorrhoids by palliative means, constipation is dealt with in one and a half lines, and yet it is from such a book that young practitioners hope to glean the experience of their elders.

Amongst operative procedures the authors choose the ligature. Whitehead's operation is dismissed in four lines of objections to it, none of which, to our mind, hold, and no details are given for its performance.

We most decidedly cannot recommend this book. Compared with the writings of Ball and Allingham, or Quenn and Hartmann (the latter of whom are frequently quoted), it has little value, but it is excellently illustrated with large and clear photographs, and the paper and printing are quite beyond reproach.

F.

The Asphyxial Factor in Anæsthesia, and other Essays. By H. Bellamy Gardiner. (Ballière, Tindall & Cox.) 3s. net.

This is a little book of about fifty pages of printed matter, and containing but scanty information for the price of 3s.

The first essay on asphyxia in anæsthesia is sufficiently interesting, and the causes, signs and means to avoid the appearance of the asphyxial element in the administration of an anæsthetic are clearly pointed out; but the remaining chapters contain such matter as one finds in any text-book on the subject, and at the same time are far from being sufficiently complete to constitute the book in any sense a treatise on the subject.

Novelties.

Messrs. Robinson & Sons, Limited, of Chesterfield, and 55, Fann Street, Aldersgate Street, E.C., have sent us specimens of their assorted sets of Aseptic Dressings, which should supply the growing demand for such materials. The method they adopt is as follows:—The dressings, cut and folded to the size required in the various operations, are enclosed in the patent container. This consists of an inner wrapper of parchment paper, outside which is another of grey waterproof wool, the whole being enclosed in an outer wrapper of glazed paper. The container, with the dressings enclosed, is placed in the sterilizer, which is then closed, and dry heat applied, thus preventing condensation of steam in the further processes. At the same time a vacuum is

produced equal to a pressure of twenty inches of mercury. Steam under pressure is then admitted, and continued for one hour. On shutting off the steam from the interior of the apparatus, the dressings are freed from moisture by further heating in a vacuum. The packets are then taken out and sealed, with aseptic precautions.

Typical sets for the various major operations, and also for minor work, are prepared. They contain a liberal supply of absorbent sponges, wool, gauze, bandages, &c., while sets to suit the special requirements of the surgeon can be prepared and sterilized at a few hours' notice, the prices ranging from 10/- to 80/- per dozen sets.

We can well imagine that a surgeon, deprived of access to a sterilizer, would operate with added confidence if provided with such materials, and have no doubt that, if they prove as reliable as their makers claim, they will soon find favour with the profession.

In Lighter Vein.

"YE GODS! MUST I ENDURE ALL THIS—?"
—*Julius Cæsar.*

Enthroned in glory Æsculapius sate
Sidereally—within the Milky way,
And crowds of courtiers anxiously await
His least behest—and eagerly obey;—
Pythagoras—Hippocrates (the Great),
Celsus and Paracelsus, Galen,—stay,
I must include his favorite son Machaon,
Whom later I've a word or two to say on.

In his right hand (Æsc'lapius's I mean)
A knotty stick he held in lieu of sceptre—
Around his neck a twisted snake was seen.
Which squirmed—the while with stony stare it kept a
Stern glance towards his right, from fear I ween,
As if it thought the staff a very spectre;—
His beard was long—of ivory his throne,
And through his laurel crown a halo shone.

John Hunter, too, and Sydenham and Bright,
And others far too numerous to mention,
Regarded Æsculapius in the light
Of one who should receive their grave attention,
For though they thought his practice not quite right
Some of his theories justified retention.
They thought that he by genius and tradition
Held premier place as Surgeon and Physician.

But Hahnemann was absent from the throng
Of medical alumni gathered there,
The chaff they gave him proving much too strong,
Although he did not seem to mind or care.
Sometimes he thought his theory *might* be wrong,
But when he started arguing—then and there
They quoted to him, with good-humoured banter,
"Similia similibus curantur."

But one there was, remote from all the rest,
Whose tender smile bespake a peaceful mind,
And seemed to nurture in his gentle breast
A loving scheme to benefit mankind;
With fingers interlaced his hands he pressed,
As if benevolence did stronger bind
His heart and soul to a long-cherished plan
Whereby to ease the pangs of suffering man.

And Æsculapius noted where he stood,
And loved him dearly—even as a son.
He oft had pondered deeply on the good
And the renown this Thomas Guy had won,
Yet being anxious without being rude
How in his honour something might be done,
He thought a public festival a grand hit,
But knew that Thomas Guy would never stand it.

Of all the things Guy hated worst of all
Was being chief guest at a public dinner;
To have been present at a public ball
He would have dubbed himself a graceless sinner;
As lief would he have peered in every stall
At Newmarket to try and spot the winner,
As have sat feasting on a public dais,
Even though a mitred bishop had said grace.

With step majestic and with smiling mien
Æsc'lapius then descending from his throne,
Approached the place where Thomas Guy was seen,
And gracefully his regal arm was thrown
His shoulders o'er (as bluff King Hal's had been
Once on a time as history has shewn
Round somebody) and much to his surprise
Enquired how they were getting on at Guy's.

"At Guy's, sire, they are doing very well,
Thanks to the Dean, and keeper of the treasure;
The amount of funds in hand I cannot tell,
But every Guy's man seems to take a pleasure
In doing what he can to make it swell,
Devoting to that end much of his leisure.
I'm sure to all I am extremely grateful,
To me e'en needful begging was most hateful."

"Which is the Dean"? "Why, there—he's lecturing now
Most ably on disease of the aorta—
A man still young, with an expansive brow
And clear a head as ever yet has taught a
Class of young students, yet in accents low,
But diction clear and manly, he has brought a
Subject as difficult as one could mention
Entirely within their comprehension.

Now see how eagerly the students follow
His every word, and cease all senseless noise,
His teaching's sound (his theory never hollow),
And given with his head in backward poise,
And brows oft twitching——" "Stay, why that's Apollo,
Excuse me, Guy—I really have no choice,—
To interrupt you I am truly sorry—
But list to those sweet strains of Annie Laurie." A.

Correspondence.

To the Editor of Guy's Hospital Gazette.

South African Memorial Fund.

Dear Mr. Editor,—I send you a cheque for £2 2s., as a small contribution towards the memorial for those who have died in South Africa.—Yours sincerely,

Superintendent's Office, Guy's Hospital. E. C. PERRY, per F. H. B.

30th March, 1901.

Dear Mr. Editor,—I enclose a cheque for a guinea, as a contribution to the South African Memorial Fund. I don't think the fund should be put to any utilitarian use.—Yours sincerely,

41, Devonshire Street, W., March 30th, 1901. W. S. HANDLEY.

Tempora Mutantur.

Turning over some old papers a few days ago, I had the luck to come across some numbers of the Guy's Hospital Gazette, issued in the palmy days of its youth. Every reader of this paper knows—or should know, which is not quite the same thing—that the first number saw the light in 1872. My copies commence with the first of the new series, January, 1876, and a cursory examination of their contents reveals much that is curious, and not a little that is quaint. With the reader's permission we will open the first number, and, according to the custom which is preserved unto this day, we will look at the editorial first of all. There was no "Passim" in those days; the short paragraph system had yet to replace the more ponderous and more dignified "leader" so familiar to readers of the *Times*—or *Mail*. The leader is barren, for here the Editor is engaged in feeling his ground, while at the same time he is flourishing before the eyes of his startled and amazed audience the novelties that shall henceforth deck the pages of the paper. Most of them, it is true, are subsequently realised: but his ideals and aims sink far below the low-water level of a modern editor. Clinical lectures, then, as now are a strong point; but longhand still holds its ground, and the hour's work is compressed into a sadly inadequate space. "Dr. Wilks then turned his attention to affections of the brain. . . . House-Surgeons sometimes fell into discredit for sending away these patients under the belief that they were the subjects of alcoholism. He did not blame them for not finding out what was the matter, but for pretending to do so. No doubt if hospital accommodation were greater such disasters would not arise." This far-away premonitor of the furious blast of penny wrath—"Hospital neglect—drunk or dying" is refreshing even in the *fin de siècle*. Later on, while discussing uræmia Dr. Wilks speaks of the unknown toxic agent here at work: "the poisoning agent was not known, urea, uric and oxalic acids, creatinin had all been suggested without sufficient proof; neither was its source, for there were some physiologists who now said that urea was formed *in the kidney*, and not, as was usually taught, in the tissues." Next follows an account of the treatment of two cases of hyperpyrexia by the application of cold water, and the reporter prefaces his remarks by the bland statement that for the sake of brevity many of the intermediate temperatures have been omitted! Could they never have known the joys of expatiating on a neatly constructed temperature chart; never have felt the thrill of pride at the explanation of the humps and dips, when the mercury at one moment shrinks coyly into its bulb, and at the next leaps defiant to the utmost confines of its crystal prison. When the eye falls upon the report of that ancient and honourable body, the Physical Society, attention is immediately arrested by a discussion on typhoid fever. What did they think of it then? What was current opinion in those days? Read on. "It is the result of some poison being taken into the system, either from the effects of bad drainage, or from effluvia arising from pigsties, or stagnant pools being too near the house, or from spoiled articles of food and contaminated drinks; milk may be the cause of the spreading of the fever, or it may be taken from the effluvia arising from the fæces of a patient. Typhoid fever was undoubtedly contagious . . . the contagious nature was incontestable." As to treatment, "he objected to medicine unless there were complications. If the temperature rose above 105·8°, he would bath, not bringing it below 101°, as by so doing the patient's life is endangered." A good deal of stress was laid by members in criticising the paper on the importance of distinguishing typhoid fever from "surgical fever, and other low conditions," while the cause of the ulceration of Peyer's glands was the source of much discussion. The view most favoured appears to be as follows;—

The poison was absorbed from the intestines, and thence carried to the liver, where it so acted on the bile that the patient could not change the chyme, and the bad chyme, acting on the solitary glands, produced the ulceration. On this account a little mercury, administered early in the disease, was considered the best treatment. It must have been comforting to the nervous ward clerks of the time to be informed that "people in the vicinity of the disease might get their blood into such a condition as not to be liable to the disease." Unfortunately the optimist who vouched for this statement did not add the course of treatment necessary for this fortification of the system.

The spreading of disease by the excreta was mentioned, but did not create much impression, and it was stated that if the disease did not arise from drains, etc., it must arise "de novo"; it had been found in some army statistics that the men in healthy ports had typhoid, while those attending on fever patients were exempt from the disease. We hardly think this statement will be borne out by modern statistics, and, for our own part, would much prefer to take our chance in the "healthy ports."

The reports on the electrifying room are interesting reading; we find that, besides the various paralyses, there were treated in this department such disorders as deafness, amenorrhea, and hysteria, while 165 miscellaneous, and 430 unnamed diseases received benefit from this method of treatment. We trust that the Assistant House Physicians of to-day will not be tempted to relieve the pressure of a busy afternoon at "the back" by presenting their patients suffering from "unnamed diseases" with cards for the Electrical Department.

A large portion of the Gazette was occupied by the publication of examination papers. We can imagine the candidate of the present being somewhat staggered by being asked to "enumerate the Antilithics or Lithontriptics" with mention of their particular use and mode of action. Many of the questions, however, we have met with since, being apparently of the stock order, and always at hand when an examiner is at a loss as to what particular form of torture he shall apply.

Sport does not occupy much space, but was none the less an important item. We read of a game between Guy's and St. George's played "on our ground at Blackheath," which resulted in a win for the hospital by 2 goals to nothing. The game bore a different aspect to that of to-day, for "the Guy's forwards playing well together, invariably took the ball through, being well seconded by the men behind them." How would our halves and three-quarters like to be told that their place was to second the men in the "scrum"?

(To be continued).

Sport.

Rugby Football.

REVIEW OF SEASON 1900–1901.

The past season may fairly be said to have been most successful, culminating as it has in decisive victories over the four strongest hospitals, and the return of the Cup to its original home.

At the beginning of the season our prospects were a little uncertain, as we had lost several members of the heavy pack of forwards, on whom we had chiefly relied during the past three years. Behind the scrum, however, there were few changes, and here we were distinctly strengthened by the inclusion of McEvedy and Orpen, and the return of M. C. Wetherell to his old place at half. Indeed, it may safely be said that Guy's has not had a more useful set of backs for many years past, while the forwards, though somewhat light, gained in experience as the season went on, and never spared any effort to keep themselves absolutely fit. The result was that by the end of the season we had a team exceedingly useful, though at the same time peculiarly free from any individual brilliancy. Just before the Cup-ties we were very unfortunate to lose Mullins, who has done so much for hospital football.

In all, the first fifteen played twenty-one matches, winning 15, losing 6, and scoring 218 points to our opponents' 95. With the exception of the matches against Croydon, and the Cup ties, there were no very notable successes, while, on the other hand, our defeats, except the game against the London Scottish and the first game against Rosslyn Park, were in no way discreditable. In the Cup ties we have reason to be proud of the results, for we came out of the competition without having a point scored against us. We defeated St. Mary's in the first round by 13 points; St. George's in the second by 20 points, St. Bart's in the semi-final by 19 points, and London in the final by 21 points—in all 73 points to nil. The most brilliant victory was over St. Bart's, who made a hard fight of it all through.

This year the Welsh tour in conjunction with St. Thomas's was abandoned, and the two hospitals were combined in only one match against Blackheath, in which they were defeated by 3 tries to nil.

Morgan (15), McEvedy (11), and Orpen (9) have been the most prolific scorers during the season. Tries were also scored by Thomas (3), O'Brien (3), Wadson (3), Pye-smith (2), and Anderson, F. C. Wetherell, Wall, Thompson, and Hicks (1 each). O'Brien and Morgan have kicked most of the goals.

The second fifteen has done only moderately well this season. Of 28 matches arranged only 16 were played, the inability of our opponents to raise a team being responsible for the cancelling of the majority of the remainder. Of the matches played, 8 were won and 8 lost, 128 points being scored to our opponents' 159. We again entered for the Surrey Cup, but were beaten by Sutton in the second round by one try to nil, after playing extra time and having been one man short throughout the game.

The results of the third fifteen's season are not satisfactory, 4 games having been won, 1 drawn, and 12 lost. Although the team has often had hard luck, the bad season is mainly due to slackness among the junior men. Such things as late scratchings, want of practice, and above all failure to turn up, have been only too common.

The fourth fifteen has played fairly regularly throughout the season, but its record, though somewhat better than the third's, has been spoiled by the same causes.

The following are the results and scores of the First Fifteen matches:—

	Result.	For. Goals	For. Tries	For. Points	Against. Goals	Against. Tries	Against. Points
v. Kensington	won	1	3	13	1	1	8
v. Lennox	won	1	0	5	0	0	0
v. Catford	won	1	1	6	0	0	0
v. Cambridge...	lost	1	0	5	2	2	13
v. Rosslyn Park	lost	1	0	5	4	0	20
v. Royal Engineers	won	0	3	9	1	0	5
v. Bedford	won	0	2	6	1	0	3
v. Old Merchant Taylors ...	lost	0	1	3	1	0	5
*v. Blackheath	lost	0	0	0	0	3	9
v. Croydon	won	2	2	16	0	1	3
v. London Scottish	lost	0	0	0	0	3	9
v. Old Leysians	won	1	1	8	0	0	0
v. Rosslyn Park	lost	0	1	3	1	0	5
v. Kensington	won	2	1	13	0	2	6
v. R.I.E.C.	won	2	0	10	1	0	5
v. Croydon	won	3	2	21	0	1	3
v. Marlboro' Nomads	won	1	2	11	2	0	8
v. London Irish	lost	0	1	3	2	0	10
v. St. Mary's Hospital ...	won	2	1	13	0	0	0
v. St. George's Hospital ...	won	1	5	20	0	0	0
v. St. Bartholomew's Hospital	won	2	3	19	0	0	0
v. London Hospital	won	3	2	21	0	0	0

* Combined with St. Thomas's Hospital.

Association Football.

The Association Football Club has had a very successful season, and was very unfortunate in not being able to bring either of the cups home to Guy's. After getting through two rounds of the Surrey Senior Cup, we were beaten in the third by East Sheen, by 3 goals to 2; and in the Final, Inter-Hospital Cup, we were defeated by Mary's by 2 goals to 1. In the ordinary matches the team always showed splendid form and were only once beaten—that being in the first match of the season against the Old Harrovians, before we had got our proper team together.

Thus the result of the season is:—20 matches played, 14 won, drawn 3, lost 3.

Next year we unfortunately lose Shepherd, and our captain Robson; but we hope, with the addition of some good freshmen, to have a still more successful season.

The second eleven, of whom Peall has acted as Captain, have had a very successful season, having played 21 matches, of which they have only lost 3. They were beaten in the third round of the Surrey Junior Cup by the Parthians, and reached the final tie for the Inter Hospital Junior Cup. In this game, however, they were defeated by the second eleven of the London Hospital, by 3 goals to nil.

Messrs. H. Watney and J. S. Smalley arranged a programme of matches for a third eleven. In all 10 games were played. Of these they won 5, lost 3, and drew 2, scoring 21 goals as against 15 scored by their opponents.

Appointments.

CIVIL.

Audland, W. E., L.R.C.P. Lond., M.R.C.S. Eng., has been appointed Certifying Factory Surgeon for the Wellingborough District of Northants.

Clowes, Ernest F., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer to the Wotton-under-Edge District of the Dursley Union, *vice* B. Simmons, resigned.

Dismorr, H. B., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer to the Workhouse and Assistant Medical Superintendent to the Infirmary, Lewisham Union.

Phillips, F. B. Willmer, M.A., M.D. Oxon., B.Sc. Lond., M.R.C.S., has been appointed Physician to the Bedford County Hospital.

MILITARY.

Major R. E. R. Morse, R.A.M.C., is promoted to be Lieutenant-Colonel.

Births.

SCOTT.—On March 13th, at Poole Road, Bournemouth, the wife of Bernard Scott, M.R.C.S., of a son.

WORTHINGTON.—On March 21st, at Chesterfield, the wife of Sidney Worthington, M.D., F.R.C.S., of a son.

Marriage.

ROWLAND–PLUMER.—On March 28th, at Shoreham, Sussex, Frederick William Rowland, M.B., B.S. Durh., M.R.C.S., L.R.C.P. Lond., of 6, Waterloo Place, Brighton, to Alice, daughter of Alfred S. Plumer, Esq., of Springwells, Steyning, Sussex.

Deaths.

GROWSE.—On March 30th, at Bildeston, John Lawrence Growse, M.R.C.S., L.S.A., in his 69th year.

JIMENEZ.—On March 7th, at San José, Costa Rica, Central America, Gerardo Jiménez, M.B., B.S., aged 33 years.

MORRIS.—On March 27th, at Hayes, Kent, Thomas Morris, M.D., late of the Stock Exchange, in his 83rd year.

NOTICE TO CORRESPONDENTS.

The Editor wishes it to be understood that no communications can be inserted which are not guaranteed by the name of the sender. All articles must be written on one side of the paper only.

Ed.—F. G. G.

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Notice.

All Communications, Articles, Letters, Notices, and Books for Review, should be forwarded, accompanied by the name of the sender, to the Editor, Guy's Hospital Gazette, *Guy's Hospital, S.E.*

Any of our Subscribers who may be desirous of having their numbers of the Gazette *bound should leave them with the Librarian.*

The annual Subscription to the Gazette *is* 6s. 6d.; *post free,* 7s. 6d *All financial communications, as well a subscriptions, should be sent to the Financial Editor,* Mr. C. H. Wells, Secretary's Office, Guy's Hospital.

The charge for binding in blue, with the Arms of the Hospital in gold will be One Shilling and Sixpence.

Calendar of Coming Events.

April, 1901.

Sat. 27.—Messrs. Jacobson and Fripp's take-in; Drs., P. H. B. Odgers and F. H. Parker; Cl., S. J. Ormond.

May.

Wed. 1.—Summer Session begins.

Thur. 2.—Messrs. Howse and Symonds' take-in; Drs., H. J. Gater and G. Moir; Cl., J. A. Andrews.

Fri. 3.—9 a.m., Dr. Washbourn lectures on Bacteriology. 1.15 p.m., Clinical lecture by Mr. Symonds.

Sat. 4.—G.H.C.C., I., v. London County C.C., home. G.H.C.C., II., v. Old Charlton, away.

Mon. 6.—Dental Practical Examination for Prizes begin. 9 a.m. Extractions.
Final M.D. Lond. Examination begins.

Wed. 8.—9 a.m., Dr. Washbourn lectures on Bacteriology. 1.30 p.m., Clinical lecture by Dr. Hale White.

Thur. 9.—Messrs. Lucas and Lane's take-in; Drs., A. J. Beadel and A. C. Osburn; Cl., E. C. Bevers.
Primary Fellowship Examination.
G.H.C.U., Freshmen's Meeting.

Fri. 10.—1.15 p.m., Clinical lecture by Mr. Symonds.
First Professional Final L.D.S. Eng. Exam.

Sat. 11.—G.H.C.C., I. v. Brentwood, away.
G.H.C.C., II. v. Nondescripts, home.

Guy's Hospital Gazette.

APRIL 27, 1901.

A Case of Cancer of the Lung and Mediastinum.

CLINICAL LECTURE BY Dr. TAYLOR.

March 23rd, 1901.

Gentlemen,—The case I am going to speak of to-day is that of a girl, æt. 22, who came in on the 14th of this month, and was admitted for swelling in the neck and dyspnœa.

The patient is stated to have been "laid up" for six to nine months, when twelve years old, with brain fever. She was delirious at times and the illness left her weak and thin. She has been weak and subject to faintings since, and pants on exertion. She has complained of no definite illness, but has had a slight cough for months. The present illness began five weeks ago, when she had to leave off work through not feeling well. A swelling appeared in the right side of her neck and her voice got husky. She rubbed her neck with oil, and the lump subsided, but soon appeared again, has gradually been getting larger, and has lately become more painful. For the last fortnight she has been worse, and for the same time has had pain in her right upper arm. Her cough has been worse lately, and keeps her awake at night, so that she sleeps badly. There has been some expectoration. She sweats a good deal, but not more at night than at other times. She has had a good deal of retching, but has only vomited once. She has been getting worse each day lately with breathlessness and a choking sensation in her throat. There is no history of of rigors.

"Present condition:—The patient is a small and delicately built girl. Pulse 144, temperature 100°, respiration 44. She is fairly well nourished, but pale and somewhat cyanosed. She can lie back in bed, but prefers to be propped up, and is easier in that position. She is breathing quickly with slight dyspnœa, but no stridor. She complains of pain in the right side of the neck, in the right axilla, and down the right arm. She is somewhat

deaf, mainly on the right side, and can only speak in a husky whisper. There are two small patches of herpes on the upper lip. There are several dilated veins over the right shoulder and upper part of the right chest, which are not evident on the left side. There are some enlarged and painful glands in the right axilla, and patient will not allow of full abduction of the arm. The brachial artery is felt for its whole length as a firm, tight, hard, thickened cord, painful and tender to touch. The pulse is present at the wrist, and the artery can be felt pulsating throughout its length.

"There is œdema over the root of the neck, on the left side, extending down over the chest for the upper two intercostal spaces. The right side of the neck is larger and fuller than the left; it is also harder and more painful and tender. Masses of enlarged glands can be felt in the posterior triangle, also apparently behind the sternomastoid, and pushing forward from beneath it. The mass does not move with the larynx on deglutition. There is some prominence of both eyes, which was noticed first three days ago, but she is able to close the lids over them. There is no discharge from either ear, nor any pain, tenderness, or redness about the mastoid process. The left side of the chest moves slightly better than the right. There is impaired resonance on the right side behind, from the lower angle of the scapula downwards. Over this area the respiratory murmur is deficient, and the breathing is almost bronchial in character. There are also numerous crackling râles, and similar râles can be heard at the base in front. The sputum is glairy and slightly rusty, full of staphylococci, with a few diplococci. Heart normal.

"The patient has vomited once, and has a good deal of retching. Tongue slightly furred, no swelling of epiglottis or arytæno-epiglottidean folds; no post-pharyngeal swelling. Abdomen, liver, and spleen apparently normal. Patient is constipated as a rule; bowels opened yesterday once; fæces normal. Urine: Specific gravity, 1032, clear, dark yellow, with a deposit of urates; no albumen, sugar or pus. Menstruation regular every four weeks; less profuse than usual."

Well, then, you see what we had in this case. There were dyspnœa, lividity of the face, and œdema of the right side of the neck, of the right arm, and of the upper part of the right chest. There were enlarged glands in the axilla and neck, and there was some dulness of the right side of the chest, with deficient entry of air, some râles in parts, and some modification of the breath-sounds in the direction of bronchial breathing.

From this date she rapidly got worse. The physical signs of the right side of the chest became more pronounced; there was increasing dulness, and there was a development of definite bronchial breathing at one space on the right side, somewhat below the nipple, and at the upper part near to the clavicle. The œdema of the arm and neck increased considerably, but it was confined to that side of the body, and did not extend to the left side at all. I examined the larynx again the day after she came in. It was slightly congested, and there was some swelling of the arytæno-epiglottidean folds. She got worse, the dyspnœa became greater and greater, and the patient found she was obliged to sit up almost in an erect posture in order to breathe. Ultimately the pulse got quicker and irregular, and could only be felt with difficulty, and she gradually sank on the 21st of the month, that is, seven days after her admission.

We have the specimens here, and the condition is an extremely interesting one. The right lung is very completely affected by malignant disease. There are disseminated throughout the lung minute growths, some of them extremely minute, others of somewhat greater size. If you look at a section of the lower lobe of the lung, it seems to be entirely sanded over, as it were, with very minute particles of what is obviously new growth; while in the upper and middle lobes the growths are of a larger size, so that in the middle lobe the substance of the lung almost approaches the state of what we may call infiltration, the visible amount of growth being much greater. In the upper lobe you will find a more mixed condition—that is, towards the middle lobe there is a more complete infiltration, and the upper part of the upper lobe is more

like that of the lower lobe—there is a fine sand-like growth.

In the right pleural cavity was about a pint of slightly blood-stained, yellowish-red, or reddish-yellow fluid. That the quantity of fluid was small is shown by the condition of the lung, which is not obviously compressed as it is when the amount of fluid in the chest is much larger.

In the upper part of the mediastinum there is a quantity of new growth surrounding the large vessels. In this specimen the heart has been opened, as well as the superior vena cava, and the two venæ innominatæ, and it is obvious that all these vessels are encroached upon by masses of growth from the outside. The right innominate vein is very much more compressed than the other, and the malignant disease occurs apparently right in its wall, and there is a thrombus in the interior of the vein. All around the vein you can see the obviously new growth occupying very largely the glands. In the upper part of the superior vena cava, just where the left vena innominata comes in, there is a nodular mass like a marble, and another one close by its side, forming a projection, driving the vein wall itself into the calibre of the vein, so as to form a prominence which undoubtedly obstructed the current of blood.

There are numerous small nodules of growth over the anterior part of the heart, especially the upper part of the left ventricle, and over the infundibulum.

We all know, of course, that malignant growths are apt to appear in many places, and in this case we found secondary deposits in the liver and in the kidneys, and in the suprarenal capsules. The liver presented a few, the kidneys a considerable number of nodules about the size of peas or smaller. I saw them at the post-mortem, and both kidneys were affected like that; the suprarenal capsules presented small deposits, smaller than peas, occupying a considerable portion of those rather small organs.

I am not prepared to speak about the histological character of these malignant growths. They had, to the naked eye, the appearance of sarcomatous rather than of carcinomatous growths; and in a young person, twenty-two years of age, one does not so frequently get a carcinomatous type of growth as one which is sarcomatous.

The other points of the case, you will see, are these. There is a pretty extensive growth of cancer in one lung, not by any means completely destroying the alveolar structure, but leaving much of it still soft, pliable and spongy, so that there must have been a considerable amount of lung capable of performing its functions. In the middle lobe the proportion of lung found as healthy is very much less, and in the upper it is not so abundant as in the lower lobe. Associated with that there was some pleuritic effusion which is a very common result of cancer in the lung or mediastinum, either because there is some irritation of the surface of the pleura, or because the veins connected with the pleura are pressed upon in the mediastinum.

I suppose, practically, we may say that that is almost the whole case—that an interference with the circulation, a pretty considerable implication of the lung, and that, possibly, also, an effusion of fluid which took place towards the end were all factors in the fatal result which ensued.

Now there are many points that arise out of a case of this kind. I am leaving out of discussion the exact histological nature of the growth. I will only briefly refer to the circumstance which gave us perhaps some amount of anxiety as to where the primary growth was situated. If this is sarcoma, it is highly probable that the condition of the lung is primary, but, of course, that is a matter which may be open to question. I mean, if the condition of the lung is primary, these glandular enlargements are secondary. Of course, if that were the case, it would necessitate that the history of the lung would be much longer than the history of the disease in the mediastinum. So much of this (indicated) looks so entirely fresh that it seems to be of later date than one finds in the mediastinum. I prefer to leave open that point at the present time.

Now you see that the results of the growth in the two situations are mainly these: the pleuritic effusion and the obstruction of the

veins. And we see that there has been an extension to other parts—the pericardium, liver, kidney and suprarenal capsules.

I am proposing to take this subject from two points of view:—the condition of cancer of the lung and the symptoms cancer of the lung will produce; and the condition of the mediastinal tumour involving the destruction or impairment of the various parts in the mediastinum. They are both rather large subjects, and it is obvious that I cannot deal with them completely, but I may be able to bring before you some of the important facts in relation to these two conditions:—cancer of the lung, and cancer of the mediastinum, which are associated together in this case, and which you will find, when you look up the subject in medical literature, are often considered together under the heading "Intrathoracic Growths."

One of the well-known marks about cancer of the lung is, that it is very often secondary, but may also be primary, as I have implied already. No doubt, I think, cancer is much more often primary in the lung than in the liver. The liver is perhaps the organ which, of the various viscera, is most frequently invaded by such a growth. Cancer of the liver is most frequently secondary. Cancer of the lung is, undoubtedly, more often primary.

The question is—In what form does one meet with cancer of the lung? because it is necessary, in order that you may successfully diagnose cases of this sort, that you should bear in mind the kinds of invasion of the lung that one meets with. Here we have one kind. I dare say the next case that you meet with will not be in exactly the same form. Cancer may occur in the lung in a disseminated form—disseminated all over the lung. You will see some specimen post-mortem sometimes in which the growths are scattered through the lung pretty uniformly, In other cases you get lumps, large nodules, such as this kidney presents, scattered more or less uniformly over the lung, yet not by any means occupying a large area of the organ, so that much of the spongy tissue is left, and the breathing is not far removed from normal. Sometimes you will see large flat masses of cancer on the surface of the lung, which do not grow deeply into the substance.

You also sometimes get a more or less uniform infiltration, that is to say, the whole lung is one mass of growth. How this condition is begun it may be difficult to state. Whether it has begun as separate masses, and they have run together and formed one confluent mass, as seen at the last; or whether it has extended from one point. The probability is that in most cases it arises from separate masses uniting together, as happens in the case of the liver.

Then there is another very important way in which cancer invades the lung, and that is, from the root, and especially by means of a primary lesion in the bronchus. Primary cancer of the lung every now and then, perhaps not so infrequently, starts as a growth in the epithelium of one bronchus at the root of the lung, and gradually invades the lung from that point, and in that case does, for the most part, form a single mass, invading successive parts of the lung as it grows. And another form of invasion which sometimes resembles it, is that which you sometimes get in consequence of the growth starting in the œsophagus. You know that you get epithelioma of the œsophagus as a comparatively frequent form of the development of cancer in elderly people, and that epithelioma of the œsophagus, if it is not too rapid in its starving effects, in some way ultimately invades the lung, partly presses upon the bronchial arteries or on the lung itself, and sets up gangrene or broncho-pneumonia, and also itself directly grows into the lung so as to produce very disturbing effects upon the organ. You might regard that as being a secondary process altogether and not as fairly coming within the category of cancer of the lung itself. If we exclude that, we have still these three forms in connection with which, from a clinical point of view, you have to consider the subject of cancer of the lung; a scattered distribution of the cancer; a uniform infiltration by it; and commencement of the cancer in a bronchus, and invasion of the lung as the mass grows from that bronchus into its substance. In this diagram I have drawn the cancer, as if it were commenced in one of the larger bronchi, and that is the more frequent

form. But I had a case some time ago in which the lower part of the lung was the subject of a cancerous mass which subsequently suppurated. This appeared to have arisen from a bronchus, and I suppose that the growth in the bronchus started somewhat lower down than in the greater number of cases.

Well, now we come to the two questions: What are the results of these cancers in their further development; and, what are the symptoms which they produce? In their further development I may call attention to one or two important points. One is, that you very frequently get an extension to the cervical glands, and masses of cancerous growth occur above the clavicle and near the posterior triangle of the neck as we see was the case in this patient. Another effect I have already referred to, and that is, the occurrence of pleuritic or pleural effusion, produced partly, perhaps, from irritation of the surface, and partly by obstruction of the veins, but constantly occurring, so much so that an important difficulty is introduced into the diagnosis of both diseases; because one has to recognise that if a patient should have a pleural effusion which has come on, whether suddenly or slowly, he might have behind that a malignant disease which has caused it. Thus you must not always too hastily attribute a pleural effusion either to catarrhal influences, or to the very useful influenza, or even to the almost as useful tubercle. But cancer has got to be considered even when you have no symptom or sign whatever other than those of pleural effusion.

Is the nature of the liquid in the pleura in any way diagnostic? Supposing you tap fluid, can you tell whether it is associated with cancer or not? A great deal has been made at different times of the probability that a pleural effusion which is provided by a cancerous lesion will have a quantity of blood in it, and that other effusions will not have blood in them. Well, I think it is almost unnecessary to repeat the objections to that idea. The facts are entirely against it. It is extremely common to get blood staining a pleuritic effusion which has nothing whatever to do with cancer. In numbers of cases of pleuritic effusion such as we are daily seeing, whether they be catarral, or influenzal, or tubercular, the liquid may be stained, even deeply stained, with blood. Again it is quite sufficiently often observed that cases in which cancer is at the bottom of the pleural effusion present a serum which is perfectly clear and free from blood.

So that had we drawn off this blood-stained fluid during life, it would not have been of any assistance to us in the diagnosis of the presence of cancer.

I come to another condition following upon cancer which I believe is much more frequent, and upon which, perhaps, not sufficient stress is always laid. It is this. If cancer grows into, or obstructs a large bronchus, then it is very likely to be followed by the occurrence of bronchiestasis or dilatation of the bronchial tubes. If a bronchial tube is obstructed there is a diminution of air entering into the chest, and a tendency for the lung to collapse in consequence of the fact that air does not get into it, while the air which is there already gets absorbed. But, in addition to that, the bronchial tubes become dilated beyond the position of the growth, forming cavities which will contain a quantity of pus. This may decompose and become offensive, and its expectoration may give you some clue as to the nature of the case, if you bear in mind this association, but on the other hand may mislead you if you forget how bronchiectasis so often arises. That a bronchiectasis takes place is a fact, as one well knows, which is not peculiar to cancer. It is due to the fact that there is a partial obstruction to the bronchial tubes, promoting the retention of the secretion, in consequence of which there occur softening and inflammation of the bronchial tubes, and then dilatation. I dare say that bacteria and septic processes in connection with them have a considerable share in the production of these anatomical changes. This condition of dilatation is caused not only by cancer but also by syphilitic stenosis, *i.e.* by the cicatrization of a syphilitic ulcer in one of the larger bronchi. You may have it occurring also as the result of pressure of an aneurysm upon a large bronchus.

I mentioned just briefly, when I was giving you this rough sketch, a case in which the growth had suppurated. Suppuration of a malignant growth is not very frequent, but still it does take place, and it may lead to difficulty in the matter of diagnosis. The resemblance which the case that I am referring to bore to a case of empyema was very considerable. The patient had a lesion at the base of the lung, causing dulness at the base, and loss of breath-sounds, loss of tactile vocal fremitus, loss of vocal resonance, and so forth; and in association with that there was a septic condition, such as one finds when there is pus in the chest. The diagnosis was almost necessarily an empyema. The supposed empyema was opened and a cavity was discovered, which, however, did not quite satisfy the conditions of an empyema, because it was found that the interior was not quite like that of a pleural cavity. Shortly after the operation hæmorrhage took place, followed after a time by still more profuse hæmorrhage, from which the patient died. It then appeared that the trouble was due to a suppurating cancer, and not to an empyema.

I pass now to some of the symptoms that one finds in connection with cancer. Dyspnœa, of course, is common. It depends very much on the extent to which the lung is involved, or to which the bronchus is obstructed. If you have a large part of the lung unable to perform its function as part of the breathing apparatus, or if you have a bronchus obstructed to a large extent, you must have some shortness of breath. The other lung is not sufficient to supply the economy.

Cough is another symptom. That takes place with varying degrees of certainty. The cough, no doubt, will be very much influenced by the position of the cancer. Just as we know that pleuritic effusion can extend to a very great extent without cough being produced, so we may understand that large masses of cancer may be present without very much cough. The cough is, however, determined rather by irritation of the bronchi, and by the secretions that form in the bronchi, and so forth.

Then with regard to expectoration, the same thing may be said. Here, again, attempts have been made to find some pathognomonic symptom, and it is said that in cancer of the lung, the sputa have an appearance which justifies the name prune-juice sputa. Prune-juice sputa are not very common, and there are many cases of malignant disease in which you do not get that condition of the sputum, and indeed in which you get no blood in the sputum at all. In a case which I shall speak of more in detail, in a moment, of cancer at the root of the lung, with the production of large cavities in the bronchi, there was cough and abundance of muco-purulent sputa, but no blood.

On the other hand, in some of the cases of primary cancer of the bronchus there has been quite early in the history expectoration of a quantity of bright-red blood, such as may come from a tubercular case; and it is quite intelligible that such a case should be regarded, supposing it occur in a person of, say, forty years of age, as being a case of early tubercle.

There is another interesting question, and that is as regards fever. What is the relation of cancer to fever? For the most part cancer is unaccompanied with fever, whereas tubercle and inflammatory conditions are febrile. However, there is sometimes fever in cases of cancer.

When our patient was admitted a week before her death, her temperature was 100°, and on the same evening at 10 o'clock 100·4°. The next morning it was 98·4°, and it rose in the course of the day to 99·8°. On the following day the lowest point in the morning was 98·8°, and in the afternoon 100°; it fell in the evening to 98°, and from that time it gradually went down. She was getting more cyanosed and more livid, the aeration of her blood was getting more imperfect, and the temperature gradually fell, so that two days before her death, in the morning, it was 96°, and in the evening 97·6.°

But there are cases in which fever is present over a much longer period. I have seen cases in which fever was marked where the growths were very numerous, and one likened the enormous number of nodular deposits in the lung

to the numerous deposits of tubercle which one sees in ordinary miliary tuberculosis, and was inclined to think that the temperature might be related to the wide distribution of the lesion. This was in pre-bacterial days, I think.

But rise of temperature may be related to cancer in other ways. A gentleman was taken with what he believed to be influenza on a certain day in the month of February. He was seen by his medical attendants, and within a week or ten days he was recognised to have pleural effusion. From the very commencement of his illness he was febrile and had an oscillating temperature ranging between 98° and 101°. I think I am right in saying that within three weeks he was explored for pleuritic effusion, and none was found, and from that time to his death, which took place six months afterwards, he was continuously febrile. There was no difficulty in accounting for the fever in the later stages of his illness, but the sudden accession of fever coinciding with the first symptoms at the very commencement of his illness is much less easy to understand.

The sputum, which was muco-purulent, was occasionally examined for tubercle bacilli, but none were found. He was explored again in the second month of his illness, and the needle was inserted at several points at the same sitting. And yet there was never any result.

After a time the physical signs crept round to the front, and in the fifth month of his illness there were bronchial sounds, especially in front, towards the left, and above the nipple. About this time he began to cough up, not the ordinary muco-purulent sputum that he had been coughing, but very much more definitely purulent and also offensive sputum. He was now again explored, and pus was found in two places, and the chest was incised. The first incision went into a cavity which was very limited. Another incision was made and that went also into a cavity. These two cavities did not communicate: in fact, we had got into bronchiectatic cavities and not into the pleural cavity. No real improvement of the patient was obtained from these incisions. Pus continued to be discharged and the patient gradually sank and died about six months after the onset of his illness.

At the *post-mortem* a mass of cancer was found occupying the root and centre of the left lower lobe: it was nearly as big as the fist, and appeared to have begun in the bronchial mucous membrane. The bronchial tubes were dilated, and two had been opened by our incisions.

Now here is a case in which a resemblance to pleuritic effusion occurred early, and in which fever was present throughout and in connection with growth. It must have been one of two things: either the growth was more or less responsible for the fever, or else the symptoms did not occur until secondary effects were being produced, such as bronchiectasis, with the production of purulent sputum.

The physical signs will depend on the position and distribution of the growths. For the most part, if you have these scattered growths, you get weakness of the breath-sounds; they do not produce any physical signs themselves, but diminish the force of the breath-sounds. This may be observed in cases in which the deposits are secondary, where you have malignant disease in the breast or some other part of the body, and the lungs are involved.

If you have a uniform infiltration of the lung, you must remember that the resemblance to pleuritic effusion is very close. In some cases the whole lung is infiltrated, and you may get enlargement of the chest, with bulging of the intercostal spaces, so that there is a close resemblance to pleuritic effusion. On the other hand, if you have a mass of growth obstructing a bronchial tube, then you have a greater chance of retraction of the lung because the lung collapses as the air is absorbed from it. In either case you are apt to suspect fluid. Then when you consider that you may actually get fluid as well as the cancerous growth, you will see how complicated the case is likely to be, and how difficult it is to satisfy yourself as to the real condition of affairs. A most important point in the whole diagnosis is to get your mind on the cancer—to suspect it at all; if you do not you are very likely to be led to a diagnosis of pleuritic effusion and to miss the idea of cancer altogether.

Time, after all, does not allow me to discuss the many interesting points in relation to new

growths when they arise in the mediastinum, and interfere with mediastinal structures, more especially when the veins are involved as they were in this case.

In the Medical Wards.

CASE UNDER Dr. TAYLOR.

Addison's Disease in a Boy.

Philip 38.—A. F., æt. 11, is one of two children, the eldest of whom, also a boy, died aged fourteen, of phthisis. This is the only known case of tubercle in his family. The patient is said to have been unusually healthy as a small child, his only illness being "croup" while teething. He was of fair complexion with fair hair and hazel eyes.

His present illness began about four years ago, when he was seven years old. Marked brown colouration was noticed in the face, hands, and groins. The patient was seen by a doctor who diagnosed Addison's disease and prescribed "tablets" (?suprarenal extract). The dark colour steadily spread until the whole body was affected. The patient has been seen by three or four doctors and has been treated at the Croydon Hospital. The diagnosis has always been the same. "Tablets" have always been prescribed, and have been taken regularly for four years.

The dark colour of the skin was the only symptom noticed by the friends until three months ago, when marked wasting began. The child became quieter, did not do so well at school, was occasionally sick after dinner, was nervous in the dark, used to wake at night crying or laughing, and sometimes passed urine and motions during sleep. His appetite, however, has always been excellent, and the sickness mentioned has been infrequent.

He was admitted on April 12th. The skin all over his body is of a brown colour, like the skin of a native of Italy or Spain. The neck, face, and backs of hands are darker than the rest of the body. He presents several symptoms of defective nutrition. There is marked wasting of the muscles. His weight is thirty-eight and a half pounds. His hair is scanty both on the scalp and eyebrows, and the individual hairs are slender and delicate. The finger nails present irregular transverse ridges. There are chilblains on both feet. He is excitable and is constantly talking. His appetite, however, is excellent, and he has not been sick or complained in any way during the ten days he has been in the hospital. The pulse is very small and regular, with an average rate of 110 beats per minute.

Anæmia is very slight or absent. Eyesight is defective. There is no cough.

He is being treated with suprarenal tabloids, which he and his father say are similar to the "tablets" he has taken for four years.

In the Surgical Out-Patient Department.

CASES UNDER Mr. FRIPP.

Case 1.—A youth, æt. 18, had been rejected as a recruit for the army, the day before his admission as an out-patient, on account of a swelling in the scrotum. The patient said that he had not noticed the swelling until his attention was directed to it by the examining surgeon. The swelling was situated in the left side of the scrotum. In length it was about four inches, in shape pyriform. The skin of the scrotum was stretched over it. The swelling was hard, tense, and elastic, and was irreducible into the abdominal cavity; it was found to be translucent, and appeared to surround the left testicle. There was no associated pain, and no tenderness. A diagnosis of vaginal hydrocele was made. Tapping by means of a trocar and canula was the treatment adopted. In connection with the treatment of hydrocele, it was mentioned that one tapping is frequently sufficient to effect a cure.

The aim of every surgeon should be directed towards maintaining equilibrium between the excretion and absorption of fluid in the vaginal sac.

A classification of hydrocele was made.

A. Hydrocele in connection with the testicle.
   1. Acute.
   2. Chronic.
   3. Congenital.
   4. Infantile.
   5. Inguinal, *i.e.*, a sac of peritoneum in connection with an undescended testicle, and not cut off from the general peritoneal sac.
   6. Encysted; of—
      a. Testicle.
      b. Epididymis.

B. Hydrocele in connection with the cord.
   7. Congenital, *i.e.*, hydrocele of the funicular process, which is open in the direction of the general peritoneal sac, but closed in the direction of the tunica vaginalis.
   8. Encysted.
   9. Diffuse.

C. Hydroceles which are complicated
   10. With other hydroceles.
   11. With hernia.

D. Hydrocele of a hernial sac.

Case 2.—An adult male, with double talipes valgus. One foot had been flat since August, 1900, the other since Christmas, 1900. Patient said that he did not stand much at his work. He complained of general aching pain in the position of the tendons of the tibialis anticus and tibialis posticus, which pain was probably due to the stretching of these tendons. There was also pain in the region of the tendo-Aachillis. Although the longitudinal arch was depressed, the transverse arch of

the foot was hardly altered in shape. The chief indication pointing to this latter condition was the fact that the toes were not separated from each other by more than the normal distance.

There was no pain nor tenderness in the ball of the great toe, nor over the tubercle of the scaphoid, which are commonly positions of pain in cases of flat-foot. As the patient was not accustomed to stand at his work, other conditions giving rise to flat-foot were sought for, viz. :—

1. Ankle-joint disease.
2. Rapid increase in weight.
3. Gonorrhœa.

Sufficient evidence pointing to any of these conditions was not elicited.

Case 3.—Patient was a girl, æt. 6. She appeared to be generally healthy, although thin. She complained of pain in the upper part of the left leg. A swelling in this region was noticed ten months ago, but as it has not increased in size nor, until recently, caused any pain, no further attention was paid to it until a fortnight before the admission of the patient, when her friends noticed that she dragged her left foot whilst walking, and also complained of aching pain.

On examination, the skin over the tumour was found to be of normal colour. There was no tenderness on palpation. The tumour involved the upper two-thirds of the left tibia, was large, uniformly hard and smooth, and obliterated all the borders of the bone. There was no "egg-shell crackling." The swelling was of greater girth in its upper part, that is towards the knee-joint, than in its lower part. The knee-joint was freely movable and appeared to be healthy. The diagnosis lay between sarcoma and inflammatory new formation.

In considering the question of sarcoma the length of history must be taken into account. In eight cases of sarcoma in connection with long bones, recorded in the Hospital Reports, the average time which elapsed between the appearance of a swelling, and the onset of symptoms demanding surgical assistance, was five and a quarter months. In another case of sarcoma of the upper end of the femur, pain, especially at night, was complained of nearly three years before spontaneous fracture of the upper end of the femur occurred. The results may thus be tabulated :—

	Interval elapsing between origin of tumour and symptoms demanding surgical interference.	Age of Patient.
1.	3 months	18 years.
2.	6 "	21 "
3.	6 "	9 "
4.	6 "	29 "
5.	12 "	31 "
6.	3 "	16 "
7.	3 "	20 "
8.	3 "	13 "

If we take this table into account, it will be observed that the younger the patient the shorter is the interval, and that none of these patients were so young as the present one, who has a history of a swelling for ten months.

An Obscure Case in the Obstetric Wards.

We have recently had in Queen Ward a case of great interest from a diagnostic point of view.

A married woman, æt. 59, was sent up on February 20th with a diagnosis of ovarian tumour. Nothing in her past history was of interest, except that some two years ago she had a doubtful hernia in her left inguinal region, for which she had worn a truss.

The patient says her illness began last September, when she noticed that her abdomen was becoming distended. Soon after this she began to complain of pain on defæcation, and, on occasions, noted that "her motions had blood on them." Early this year she was admitted into a cottage hospital, and her doctor says that she then had a distinct tumour in the left of the abdomen, which was diagnosed as ovarian, and for which it was proposed to operate. Suddenly, one evening, the patient became collapsed, but on coming round no tumour was to be discovered, and it was thought that the cyst must have ruptured, and thus caused the condition.

On admission into Guy's on the afternoon of February 20th, the general condition of the patient was good, except that she was somewhat fatigued by a long railway journey. She was put to bed and seemed fairly well till 11 p.m., when she suddenly became collapsed, and complained of much abdominal pain.

On examination.—Pulse 78, very feeble; respiration 44, shallow; temperature 95·8°. Heart and lungs, normal. On abdominal examination, the left iliac region was fuller and more prominent than the right. The whole abdomen was rigid and tender, but rigidity was more marked on the left than elsewhere. Here also there seemed a solid mass, filling out the fossa and extending into the left lumbar region, but, on percussion, the whole abdomen was resonant. Bimanual examination was very painful, but no tumour could be discovered. The patient was retching, but not vomiting. Her bowels had been open before arriving, but she was now unable to pass flatus. Urine, sp. gr. 1020; acid; no sugar or albumen.

Various conditions were discussed, such as ruptured ovarian cyst, internal hernia, and volvulus, but there was no definite evidence of any one condition.

During the night the patient vomited twice, but only gastric contents was brought up. For the next twenty-four hours the patient remained in much the same condition, except that the abdomen became more distended from inability to pass flatus. A surgeon was asked to see the patient, and thought that the appearance of the abdomen suggested to him colic distension. On rectal examination some thickening of bone in front of the sacrum was felt. Colotomy was suggested, but was not performed as there was some improvement.

On February 22nd, she was examined under an anæsthetic, but no tumour could be discovered, either by

abdominal, vaginal, or rectal examination. A mass of fæces was found in the left iliac region. An enema was given the same night and produced a flattened-out motion and much flatus. It was intended to operate on February 24th, but there was so much improvement that it was decided to wait. Her left parotid, which had been painful, now became inflamed. For some days she improved, but occasionally had attacks of collapse. The bowels were opened by enemata, but great pain always resulted.

On March 12th, an anæsthetic was given and laparotomy performed. The ovaries and tubes were found to be healthy; the colon and sigmoid were also free from disease, the only abnormality being the presence of some stout adhesions between the left broad ligament and the sigmoid. These were not numerous and seemed hardly sufficient to produce kinking, with consequent obstruction. An enema given two days after the operation caused no pain. The wound healed perfectly, and for a time the patient seemed much improved, but then the old pain returned to the left iliac fossa, and with it the attacks of dyspnœa and collapse. These attacks last sometimes twenty minutes, breathing becomes laboured and asthmatical, and the patient semi-comatose. No twitchings have ever been seen. The urine has been carefully examined, but has never been found to contain albumen. The patient was seen by a physician, who could find no cause for the attacks, but pointed out her dry skin, scanty eyebrows, thin hair, and flushed cheeks, as suggestive of myxœdema. He said the dyspnœa might possibly be caused by that condition.

This case has been of such great clinical interest, and the diagnosis is still so obscure, that we publish it in the hope that comments from our readers may throw some light upon it.

C. H. B.

Chapel News.

The annual meeting of the members of the congregation was held in the Committee-room on April 17th, Dr. Perry presiding. After the audited statement of accounts had been read and passed, the annual report of the Chapel Committee was adopted. The report pointed out that two notable improvements had been made in the Chapel during the past twelve months, viz., the tessellated pavement laid down in the aisles in November, 1900, and the handsome oak screen designed by Mr. Woodd, the architect of the hospital, which has been substituted for the curtains which separated the clergy vestry from the rest of the Chapel. These alterations have greatly added to the beauty of the Chapel. The abolition of the gratings in the aisles, where the dust collected, has also contributed to its cleanliness. The scheme for the enlargement and decoration of the chancel and sanctuary is necessarily still in abeyance. Of the £2,000 required to carry out the architect's plans, £55 14s. 11d. is in hand, and another £50 has been kindly promised by Mr. Lafone. The following were elected to serve on the Chapel Committee during the current year:—Sisters Bright, Stephen, Naaman, Patience and Martha; Nurses Gibbins and Mallandaine; Miss Evans and Miss Iles; Mr. C. H. Fagge, Dr. J. Fawcett, Mr. A. R. Thompson and Mr. Blake Odgers. The *ex-officio* members are:—The Bishop of Rochester, the Rev. L. B. Sladen (chairman), the Rev. W. H. Gregory, the Rev. G. J. Bayley, Dr. Perry, Miss Swift and Mr. D. P. Watson (hon. secretary).

The Treatment of Uræmia.

The Treasurer's Prize Essay, by H. S. French, read before the Physical Society on Saturday, March 9th, 1901.

(*Concluded.*)

The following is a table* of fifty successive cases of uræmia, taken from the Guy's Hospital Medical Reports in consecutive order backwards from December, 1899. The treatment of each is given, with the result. There is also a list of figures taken from the urine charts in the reports; but since this essay is about the treatment of uræmia, and not about the alterations which occur in the urine, these figures are not given very fully. It may be mentioned that, when uræmia set in, the quantity of urea passed in almost all cases diminished. But the fact is almost valueless, because in no case do the figures in the reports record how much nitrogenous food the patient was taking at the time, nor is any account taken of the number of times the patient passed his water with his motions, or into the bedclothes under him. The figures are given with the object, rather, of indicating the kind of kidney lesion present, as far as they are able.

The fifty cases have been numbered consecutively, but afterwards they have been arranged separately into two groups—acute and chronic. Where a number is wanting in one table, it will be found in the other.

The number of black crosses gives a very dismal look to the lists. But cases which are indexed in the Medical Reports as "Uræmia" are for the most part the very severe cases. Many cases, no doubt, indexed as "Bright's disease" would show brief uræmic attacks from which recovery was complete. If these were all tabulated, the number of deaths would in every hundred cases of uræmia be very much diminished. In looking at the tables, therefore, it must be remembered that they represent the treatment, with its results, of patients with the worst type of uræmia only, and that of slighter, transient attacks, not indexed as uræmia, the treatment, carried out on the principles set out above, is by no means so hopeless as these black crosses would make it appear.

* For Tables see Supplement.

The Treatment of Uræmia.

The following are those of the 50 cases mentioned in whom the uræmia was of an **acute type**:—

No.	Name + Age	Kidney lesion	Previous treatment + remarks	24 hours Urine:- Amount in c.c.	Sp. G.	Urea in Grms.	Albumen gms.	Chief Symptoms.	Treatment and its effects.	Result.	Date in Hospital	Case Reference
1.	Mark W. 81.	Granular Kidneys	Some days	1012-	?	1·7%	2	Headache. Vomiting. Irregular Hæmiplegia. Epileptiform fits. Coma	Pulv. Jalapæ Bc ʒj doses. Inj. Pilocarpine mᵡ ʒ ss min. hyp. with pregressive results. } But not pursued Chloroform – Kills or checks fits, but they returned when anæsthetic stopped. Venesection ʒj ℥ viii, when comatose, restored consciousness for a short time; but she relapsed, had a last fit, & died.	✠	21·6·99 to 24·6·99	M W 233
3	Thomas B. 25	Acute Tubal Nephritis	Recent.	1016	?	1·5%	A good deal	Persistent Vomiting. Diarrhœa. Retention of urine. Coma. Two fits.	Hist. Bism et Morph. ʒj ss ℥ viii – did not stop vomiting. Nutrient enemata had to be given. Tr. Iodi mj ℥ in water ʒj ½ hourly – also failed to stop vomiting. Sale. Chlorid. gr xvii } Aq ad ʒjj } 4 hrly – no good result. Transfusion, ℧ iii, when comatose, (but no return to consciousness. Sank & died.	✠	23·5·99 to 27·5·99.	P S 171
4	Charles S. 75	Granular Kidneys	Sudden 2 previous acute attacks	No urine obtained.				2 previous attacks:- Jan. 31st 1899:- Sudden convulsions at breakfast. Twitching (taste) ½ hr. Comatose 24 hours. Recovered completely on 3rd day.	No particular treatment	Left quite well		
								March 6th 1899:- Sudden coughing & delirium. Coma without convulsions. Thought to be dying, but recovered completely & quickly.	No particular treatment	Left quite well		T. 175.
								Now June 3rd:- Sudden coma, without other sign. Death.	Croton oil mj ℥ } ppn Ol Ricini ʒj } Hot pack. Transfusion ℧ ii } 9.30 p.m. Slight rapping & coma on return Hot pack 4 p.m. next morning } no effect at all Inj. Ether. Hyp Inj. Brucin. et Strych. Hyp mj ß	✠	3·6·99 to 4·6·99	
8	Emily C. 3.	Chronic Tubal (Scarlet).	2 attacks, a day or two each	1030-	7 to 30	1·85 - 2·64	3 - 45	Headache Drowsiness Torpor.	Hot Pack. Pilocarpine hypoderm gr ½o	Complete recovery	14·11·98 to 18·1·99	C. S.
9	James S. 30	Chronic Bright (Scarlet)	5 days	1012	20 - 48	1·92 - 2·64	1·7 - 2	Drowsiness Dyspnœa Coma. One fit.	Hot Pack – no effect. Cupped in Loins – temporary great relief. Bled. ʒj xviii – little effect. Transfused ℧ iv, followed by cupping – temporary great relief & improvement for a time.	✠	19·10·98 to 2·11·98	P S 338
10	Jane F. 22	Granular Kidneys	?	1010-	16 - [illegible]	36 - 64.	8	Incess. vomiting. Headache Coma. No fits	Digitalis, Ipec Vomica & Caffeine. Liq. Trinitrini, minim 3000 – no effect on headache. Tr. Iodi mj ℥ 3rd hourly – no effect on vomiting. Pilocarpine hypoderm. gr ¼ – no effect.	✠	9·7·98 to 16·7·98	G. 229
11	Luke F. 67	Chronic granular Kidney.	2 days sudden	1014	? ?	? ?	5	Convulsions Coma.	Pulv. Jalapæ Bc ʒjß o n } Pulv. Salinum ʒj ℥ o.n } complete cure	Cured complete	22·6·98 to 26·6·98	H W 227
12.	Charles L. 21	Granular Kidney	4 weeks.	Complete suppression of urine while in hospital				Dyspnœa. Drowsiness Coma & One or two fits	Oxygen inhalations – stopped the dyspnœa at once Pulv Jalapæ Bc Pilocarpine (much sweating), but did not relieve coma.	✠	22·6·98 to 29·6·98	H W 225
13.	Ellen F. 56.	Granular Kidney	2 days	None obtained in Hospital. Before, 1020; slight albumen.				Drowsiness Coma. Death.	Calomel gr ß no effect Enemata.	✠	23·7·98 to 28·7·98.	H W 240
14.	Nehemiah H. 39	Small white kidney	?	None obtained at Hospital.				Complete mental failure. Dyspnœa. Coma (no fits).	Venesection ʒj xii : slight temporary improvement. Transfusion (? amount) : no result, even temporary	✠	26·9·98 to 28·9·98	H W 246
15	Jane W. 40.	Cirrhotic Bright.	8 days	1020-	42 68.	7·40 - 17·95	4 - 4.	Headache Drowsiness. Twitching face & arm. Fits & coma.	Pulv Jalapæ Bc ʒj o n ; complete relief.	Complete relief.	8·6·98 to 16·6·98.	C 296.
16.	John J. 32.	Kidneys looked normal.	Sudden onset. Death — [illegible] hours	None obtained.				Unconsciousness & fits.	Venesection ʒj xiv } no effect Transfusion ℧ ii Hot pack. Pot Brom gr xxx per rectum } no effect Chloroform – subdues the actual fits	✠	12·7·98. to 12·7·98	C. 248
18.	Eliz T. 37.	Large white Kidneys	7 days.	1010-1020.	4 - 52.	2·0 - 19·5.	½ - 4.	Diarrhœa Vomiting. Sore Throat Skin Rash Drowsiness Coma	Hist. Hæmatozyli ʒj ℥ ij } no effect Hist. Diuretica ʒj ss mxx } at all	✠	8·9·97. to 13·9·97	G. 281.
20	Ann F. 14.	Chronic Tubal nephritis.	Recent.	?	3 - 38.	1·4 - 14·1.	¾ - 4	Vomiting. Diarrhœa. 14 fits (Eclamptic) followed by incessant vomiting for some weeks. Then drowsy, coma & death without convulsions.	Chloroform – subdues fits, but they returned if anæsthetic stopped. Tr Iodi – benefited vomiting Pulv Jalapæ Bc	✠	14·10·96 to 9·1·97	C. 3.
21.	Robert W. 42.	Granular Nephritis (Epileptiform Convulsions)	7 days	1010-	24 - 84.	? - 3·36	33 - 0.	Headache Drowsiness. Convulsions.	Croton oil mj ℥ – relieved coma & fits Liq Trinitrini mj ℥ – did not relieve headache Phenacetin gr viii – always relieves headache	Much relieved.	18·11·96 to 10·1·96	C. 12
22	Alfred C. 58.	Acute nephritis Scarlet fever.	None	Complete suppression of urine				Great weakness. No loss of consciousness No headache No fits. Some vomiting. Sudden unexplained death.	Caffeine Sp. Æther Nit } no effect Pot. Cit Hist. Ammon Acetat ʒj ss mxxx Pulv. Jalapæ Bc ʒj o.n.	✠	13·1·96 to 19·1·96	C 51
25.	John B. 37	Small white Kidneys.	7 days.	None obtained in Hospital.				Violent vomiting. Stupor. Delirium. Unconsciousness.	Hydrobath ; & calomel gr ß – no effect Transfusion ℧ i, slight improvement of pulse, but no return to consciousness	✠	7·8·96 to 8·8·96.	C 425
26.	John B. ?	? (no post)		1022-	? ?	? ?	Present, with casts.	Violent Delirium. T. 106 Coma. Twitching, more violent & jerky, death.	Chloroform :- subdues fits as long as it runs pure, but they returned when it was stopped. Digitalis Pot. Brom Wet pack. Strong room Caffeine.	✠	20·9·96 to 24·9·96.	C. 507
27.	Ada F. 20.	Tuberculous Pyonephrosis	Came in from Hospital	1020-	? ?	? ?	Present.	Sudden frenzy. Stertor. Unconsciousness. Rapid death.	Injection of Brandy } aa mxx – no effect Aether }	✠	8·10·96. to 10·10·96	C. 529.
28.	James F. 59.	Chronic Interstitial Nephritis.	1 day.	1010-	84 - 116.	8·1 - 4·68.	1 - 7	Headache. Recurrent uræmic fits, with unconsciousness	Croton oil mj ℥ Pulv. Jalapæ Bc ʒj o n Venesection ʒj xvi – great relief to fits Tabella Trinitrini – headache quite relieved.	Complete Relief	22·10·96 to 8·11·96	H.W. 398
29.	Stephen B. 42	Acute nephritis	2 weeks.	1008-1018.	6 - 60.	2·1 - 11·2	4 - 9	Headache. Retching. Twitching. Drowsiness. Coma.	Diuretin gr xv as urine decreased - no effect Hot Pack. Pilocarpine gr ½ subcut. 6 times altogether ; much improvement, for a short time only	✠	11·11·96 to 10·12·96	G. 385.
31.	Elizabeth K. 40	Granular Kidneys	Sudden	No urine obtained				Twitching Headache Vomiting Hiccough Drowsiness Coma.	Comatose soon after admission. Pulv. Jalapæ Bc ʒj ℥ – no effect Pilocarpine hypoderm ; & then } no Pelocarpine + Hot bath } diaphoresis	✠	26·8·95 to 27·8·95	G. 187.
32.	Henry M. 46.	Chronic nephritis	Sudden	1020 - 1038.	24 - 48.	1·90 - 4·80	1 - 0.	Sudden unconsciousness Coma. 2 uræmic fits.	Pil. Col et Hyos gr x o.n. – great relief	Complete Relief.	17·8·95 to 22·8·95.	G. 643

20	Annie R. 14.	Chronic Tubal nephritis.	Recent.	?	3 - 38.	14 - 141.	¾ - 4	Vomiting. Diarrhoea. 14 fits (Eclamptic) followed by incessant vomiting for some weeks. Then uraemic coma, & death without convulsions.	Chloroform - subdued fits, but they returned if anaesthetic stopped. Tr Jodi - benefited vomiting. Pulv. Jalapae gr.	✠	14.10.96 to 9.1.97	C. 3.
21.	Robert W. 42.	Ascending (suppurative) (calculous) (chronic)	7 days	1010.	24 - 84.	? - 336.	33 - 0.	Headache. Drowsiness. Convulsions.	Croton oil ♏ — relieved coma & fits. Liq. Trinitrini ♏ — did not relieve headache. Phenacetin gr. viii — always relieved headache.	Quite relieved.	18.12.95 to 10.1.96	C. 12.
22.	Alfred C. 58.	Acute nephritis (Scarlatinal) poisoning.	None.	Complete suppression of urine.				Great weakness. No loss of consciousness. No headache. No fits. Some vomiting. Sudden unexpected death.	Caffeine Sp. Aetheris Nit. } no effect. Pot. Cit. Liquor. Ammon. Acetat. ℥ss ad ℥ij hora. Pulv. Jalapae gr. ℥ss o.n.	✠	13.1.96 to 14.1.96	C 51
25.	John B. 37	Small white kidney.	7 days.	Urine obtained in Hospital.				Violent vomiting. Purging. Delirium. Unconsciousness.	Hot bath; & calomel gr. 3 - no effect. Transfusion OT: slight improvement of pulse, but no return to consciousness.	✠	7.8.96 to 8.8.96.	C 425
26.	John B. ? (rupia)	?		1022-	? ?	? ?	Present. with casts.	Violent Delirium. T. 106. Coma. Twitching muscles & more violent injury. Death.	Chloroform:- restored fits as long as it was given; but they returned when it was stopped. Digitalis. Pot. Brom. Wet pack. Strong room. Caffeine.	✠	20.9.96 to 24.9.96.	C. 507
27.	Alex T. 20.	Tuberculous Pyonephrosis	Came in Hospital	1020-	? ?	? ?	Present.	Sudden frenzy. Stertor. Unconsciousness. Rapid death.	Injection of Brandy } aa m xx - no effect. Aether }	✠	8.10.96 to 10.10.96	C. 529.
28.	James L. 59.	Chronic Interstitial Nephritis.	1 day.	1010-	84 - 116.	81 - 468.	1 - 7.	Headache. Recurrent uraemic fits, with unconsciousness.	Croton oil m ♏. Pulv. Jalapae gr. ℥j o.n. Venesection ℥ xvi - great relief to fits. Tabella Trinitrini - headache quite relieved.	Complete Relief.	22.10.96 to 8.11.96	H.W. 388
29.	Stephen B. 42.	Acute nephritis.	2 weeks.	1008-1018.	6 - 60.	21 - 112.	4 - 9.	Headache. Retching. Twitching. Drowsiness. Coma.	Diuretin gr. xv as urine decreased - no effect. Hot Pack. Pilocarpine gr. ½ subcut. 6 times altogether; much improvement for a short time only.	✠	11.11.96 to 10.12.96	G. 385.
31.	Ahmed K. 40	Granular kidneys	Sudden	No urine obtained.				Twitching. Headache. Vomiting. Hiccough. Drowsiness. Coma.	Comatose soon after admission. Pulv. Jalapae gr. ℥ij - no effect. Pilocarpine hypoderm: & then } no Pilocarpine + hot bath } diaphoresis.	✠	26.5.95 to 27.5.95	T. 187.
32.	Henry M. 46.	Chronic nephritis.	Sudden	1020 - 1038.	24 - 48.	190 - 480.	1 - 0.	Sudden unconsciousness. Coma. 2 uraemic fits.	Pil. Col et Hyos gr. x o.n. - great relief.	Complete Relief.	1.8.95. to 22.8.95.	T. 943
33.	Sophia S. 50	Granular Kidneys	6 days.	♏24 at first, to 8, to 6 to 4.	Fell to 12, to 8, to 6 to 4.	15 - 126.	1½ - 4.	Headache. Orthicaria. Vomiting. Twitching. Fits. Coma.	Pulv. Jalapae gr. ℥j o.n. Liquor. Ammon. Acetat. ℥j + d.s. Venesection (? oz) — headache & twitching completely relieved for some days. Patient went out, but returned again. Later, Pilocarpine & Hot Pack — some relief at first; but when he got worse, Pilocarpine Hot pack gave no relief.	✠	24.12.94 to 30.1.95.	H.W. 26
36.	Elizabeth R. 36.	Chronic Tubal Nephritis.	4 weeks	?	24 - 46.	62 - 872.	3 - 6.	Headache. Vomiting. Grinning & twitching. Sudden death without Coma.	Pulv. Jalapae gr. ℥j o.n. } no effect at all. Liquor. Ammon. Acetat. ℥j + d.s. }	✠	30.7.95. to 3.8.95.	C 241
37.	Thomas B. 42.	Chronic Interstitial Nephritis	Recent	1008.	43. no great variation.	27.	½ -	Uraemic hypnosis, sudden attacks.	Pulv. Jalapae gr. ℥j. Liquor. Senegae ♏ ℥ij. } great relief.	Quite relieved.	31.7.95 to 18.8.95.	C. 400
38.	William H. 31.	Chronic Tubal Nephritis	?	?	38 - 284.	382-484.	22 - 3.	Drowsiness. Fits.	Pot. Brom. cured the fits. No other particular treatment.	Quite relieved.	26.11.93 to 11.1.94.	P.S. 8.
39.	Fred S. 27.	Cystic Kidneys	2 weeks	1010	very little urine.	14%-19%	1 -	Persistent vomiting. Great weakness. No coma. Muscular twitchings just before death.	Liquor. Jodi ♏ ℥ij 2nd hourly — greatly relieved vomiting. Pilocarpine gr. ⅛ subcut (7 hrs before death) - no effect at all.	✠	4.1.94 to 8.1.94.	P.S. 87.
43.	Walter B. 3	Large White Kidneys	Came in Hospital, & died soon after.	1010 - 1026.	2 - 29.	12 - 97.	½ - 22.	Profuse diarrhoea. Persistent Vomiting. Convulsions } just before death. Coma }	Liquor. Ammon. Acetat. ♏ ℥ij 6th hourly. Pulv. Jalapae gr. ℥ss o.n. Later Pulv. Scammon 8 gr. ℥ss o.n. Dry cupping to loin } much improvement for 20 hrs. followed by hot poultices } Pilocarpine subcut. gr. ⅛ (twice) no effect.	✠	2.11.93 to 17.1.94.	G. 24.
44.	John G. 20	Chronic Tubal Nephritis.	Recent	1018 - 1030.	21 - 45.	65 - 479.	14 - 10½	Dyspnoea at night. Hallucinations. Delusions. Drowsiness. Cheyne Stokes Breathing (2nd week to 14th week). Delirium. Coma with twitchings.	Pulv. Jalapae ℥j doses. Pot. Brom. gr. xxv often - slight effect only on delusions or delirium. Puncture of legs followed by gangrene.	✠	20.2.94 to 18.4.94.	G. 74.
45.	Elizabeth H. 48.	Acute Nephritis	Came on whilst in Hospital	1020 - 1024.	4 - 12.	26 - 83.	10 - 20.	Severe dyspnoea. 3 uraemic fits (24 hrs each) followed by Coma. Death.	Pulv. Jalapae ℥j o.n. Pilocarpine subcut. gr. ⅛ } 3 times, each time with profuse Hot pack } sweating, but little benefit in condition. Venesection (? 8 ounces) — gave great temporary relief, lasting about 12 hours.	✠	14.4.94 to 21.4.94.	G 143
47.	Charles G. 17.	Large White Kidneys	Recent	1013 - 1028.	? ?	8% - 18%	8 - 24.	Dyspnoea. Vomiting. Coma. No fits.	Strontii Lactatis gr. xv. Caffein Citratis gr. v. } - but rapidly sank & died. Liquor. Ammon. acetat ad ℥ij ad ½ hourly.	✠	29.8.94 to 3.9.94.	H.W. 307
48.	Ellen G. 33	Acute Tubal Nephritis — Septicaemia —	9 days	1015 - 1034.	12 - 32.	73 - 382.	½ - 10.	Headache. Dyspnoea. Pains in head, limbs, & all over body. Delirium. Hyperpyrexia (T. 108°).	Pulv. Scammon Co. gr. xxv from time to time. Tr. Hyosc. ℥j. Tr. Lupuli ℥ij. Syr. Tolut. ℥j. Aq. Camph ad ℥j. } 2 doses, but no effect on delirium. 2 leeches to temple — some relief to headache. Lint, wrung out of hot Mustard & water & applied to feet - little effect. Pot. Brom: gr. xx. Syr. Chloral. ℥ij. } p.r.n. gave patient some rest at night.	✠	28.10.93 to 11.11.93.	P.S. 295.
50.	William S. 40	Chronic Tubal Nephritis.	Suddenly ill in Hospital.	1028-	?	?	Present.	Joint pains. Pyrexia. Twitchings of limbs. Delirium. Cheyne Stokes breathing. Coma.	Liquor. Sod. Salicyl. ℥ij 3rd hourly — no effect on pyrexia or on joint pains. Pulv. Salicin gr. xx occasionally. Pot. Brom gr. xx } from time to time — little effect on delirium. Chloralamide ℥ss }	✠	27.10.93 to 5.11.93.	P.S. 302.
51.	Fred G. 58.	Chronic Granular Kidney	Ill in Hospital	1010	?	?	½ - 1.	Drowsiness. Twitching. Delirium. Death without coma.	Pulv. Jalapae gr. ℥j o.n. Liquor. Ammon. Acetat. ℥ij. + d.s. When delirious:- Tr. Jaborandi ℥j - much sweating } great benefit. Croton oil m ♏ - purging } for 24 hours. Later:- Venesection ℥ xii - no immediate effect, but next day quieter & clearer headed. Death 24 hours after.	✠	11.5.93 to 20.5.93.	P.S 309.

The Treatment of Uræmia.

Next follow the remainder of the 50 cases in which the uræmia was of a **chronic type** :—

No.	Name & age	Kidney lesion	Previous illness & duration	24 hours Urine:- Amount	Total N	Albumen	Chief Symptoms	Treatment & its effects	Result	Dates in Hospital	Case Volume
2	Emm D 57	Chronic Interstitial Nephritis	A long while	1008 ?	30-274	12-3	Headache Dyspnœa. Sleeplessness Muscular twitchings	Pulv Jalapae Co 3ij 3ss doses. Succ Ammon Acetat 3ij Tr Digit ℥xl } 4 doses = made pt v sick Tr Nuc Vom ℥x Caffein gr v Sod Sal grvj Aq chlorof aa 3ij Chloralamide gr xv } usually helped her to Sulphonal gr xxx } get to sleep Succ Pneumon 3ij } helped her headache a good deal. Hot packs } given when tinct lupulin Succ Pot Acetat 3ij } occurred, stopped fluids & made her comfortable, though kidneys did not increase urea or put Euphorbi lekanthaka gr ½ t d s. in pill, had no good effect at all.	Symptoms relieved from time to time. On the whole no improvement. Sent to Infirmary	23.9.98 to 24.2.99	H.W 6
5	Wallace 23	Suppurative Bright's disease (Abscesses in lungs)	2 months	018 ?	15%	4½	Frequent bro, exhausting over 2 months Diarrhœa Persistent vomiting Pains in legs Headache Drowsiness Coma	Pulv Jalapae Co 3ij doses Succ. Pot Acetatis Co 3ij 4th hourly no effect Hot air baths - little relief. Hypodermic — no transfusion		15.12.98 to 24.12.98	T 409
6	Joseph D 46	Granular Kidney	7 months	1008 For a great many days more obtainable Passed into bed.	8%	½	Dyspnœa. Diarrhœa. Regenerating rash Diarrhœa. Vomiting slight Anuresis! Drowsiness. Stertor. Coma	Pulv Jalapae Co 3ij doses Succ Ammon Acetat. 3ij 2 doses } a little improvement at first. Hot pack } little benefit Pulv Scammon Co Ammon carb aa 3ij doses } relieved vomiting Tr Iodi ℥j doses Hypodermic — no effect to the dermatitis Hypodermic — no transfusion Hypodermic — no bleeding.		15.9.99 to 6.10.99	H.W. 362
4	Elizabeth S 59	Chronic Interstitial Nephritis	Headache 10 or 12 years Symptoms over 3 months	1006-1008 30-44	120-154	3-6	Continuous headache Dizziness Sleeplessness Slight twitchings of mouth Wandering in mind Vomiting Hypodermic — no coma.	Well kept all the time Pulv Jalapae Co 3ij o n later changed to Succ Corn Sapas 3ij t i s Squill } great relief to cough Tr Campe Co } Senega Liq Trinitrini ℥j } = Tr Nuc Vom ℥j } = Succ Pot Acetat Co 3ij } =	Very Great Relief.	28.2.99 to 2.4.99	P. 104
17	Alice S 4	Primary Kidney Disease	8 months	1010-1020 4-82	20-195	½-4	Headache. Persistent Vomiting Muscle twitchings	Pulv Jalapae Co 3ij doses. Spiritalis } Rhus Toxicodendron } little benefit Caffeine Succ diuretica } no effect Acupuncture of legs — great relief to dyspnœa especially for short time		18.7.98 to 21.10.98.	G 243
19	Mary V 24	Chronic Tubal nephritis	a long time	1014-1020 10-76	55-403	½-1½	Sickness Headache Many convulsions Coma.	Vapour baths gave improvement. Chloroform relieved convulsions for a time Liq Trinitrini ℥vj } very slight & temporary Acid Hydrocyan dil ℥iij } benefit to headache & sickness often worse after		8.10.96 to 11.1.97	H.W 3.
23	Catherine A 45	Cystic Disease of Kidneys	6 months	1010-1015 40-56	211-246	1-8	Headache Slow mental condition Vomiting Fits. Coma Death	Pulv Jalapae Co 3ij doses Inj Pilocarp gr ⅛ Co — no effect at all		22.4.96 to 28.4.96	C 204.
24	James W 30.	Mixed nephritis	7 months	1012-1020 15-32	45-122	3-8	Headache. Vomiting Drowsiness, but Sleeplessness. Dyspnœa	Succ Ammon Acetat 3ij doses Succ Pot. Cit 3ij doses Pulv Jalapae Co 3ij doses Bleeding 3vj, great temporary relief to headache Hot air baths, again greatly relieved headache Got better, went out. Died comatose a week later		8.1.95 to 28.2.95	H.W 6
30	Samuel C 27	Small White Kidney	6 months	1015 20-108	35-380	2-22	Sickness Headache Sleeplessness Later Diarrhœa Coma Death	Pilocarpine Injections Pulv Jalapae Co 3ij doses Succ Pot Acetat Co 3ij doses } much improvement at first Tabell. Nitroglyc. — little effect on headache Chest several times aspirated Pilocarpine Injections gave temporary Relief to headache & dyspnœa in later stages Still later, Hot air baths; but chest kept on filling up, & he died comatose		27.7.96 to 29.12.96	C 405.
34	Elizabeth V 43	Granular Kidney	3 months	1020 ? (urine only once examined)	?	1-	Persistent vomiting Great weakness Mental debility Maniacal violence Death.	Strong room Pilocarpine gr ⅙ no effect at all		19.4.95 to 30.4.95	C. 82
35	Anthony S 23	Granular Kidney (3 Cases) in Ward	7 weeks	10 ounces altogether in 48 hours 1010 ?	?	35-	Headaches going on to Drowsiness Twitchings Coma	Succ Ammon Acetat 3ij } 2nd hourly Tr Nuc Vom ℥j } no effect at all Pilocarpine Inj gr ⅛ Vapour bath — slight temporary improvement Consciousness never was lost a short time then came & died a few hours later		20.2.95 to 24.2.95	T. 72.
40.							Sickness & frequency Dermatitis Convulsions Coma.	Pulv Salinum 3ij o n Succ ammon cit et Potass 3ij t d s Hot vapour baths every night for 15 mins — no sweating Pilocarpine Inj 3ss one before bath — no sweating		25.9.94 to 29.9.94	P.S 304
41	Edward B 32	Chronic Tubal nephritis	3½ months	1005-1031 6-66	61-360	4-16	Persistent Sickness Diarrhœa Headache Suppression of urine on Dec 13th.	Succ Ammon Acetat 3ij t d s Pulv. Scammon Co ℥j ℥ss o n later, Pil Colocynthidis Co Thirty gr V 6) Succ Hæmatox 3ij p r n Succ Pan et Pot Cit 3ij t d s These mixtures relieved both the vomiting & diarrhœa, & headache were very constant better & worse, but the time she was out, however, they were much better Dry cupping to loins, followed by hot vapour baths & blankets & linseed poultices to the back, all of which at once relieved the urinary & oppression	Greatly relieved	24.8.94 to 2.12.94	P.S 295
42	Mrs H 46	Chronic Tubal nephritis	6 months	1002-1014 36-90	149-442	3½-5	Headache Vomiting Bullous eruption A few nausea twitchings	Pulv Salinum 3ij o n Succ Ammon Acetat 3ij t d s Warm baths every alternate evening Liq Bark Detersens } soon cured the Liq Plumbi Subacet dil } sore Leeches to temple — at once relieved headache Liq Trinitrini ℥j } Kept headaches from Tr Belladonnæ ℥j } & ultimately Tr Nuc Vom aa ℥ij } cured them. Aq ad 3ij	Greatly relieved	15.10.94 to 19.12.94	P.S. 329
46	Sarah P 58	Chronic Interstitial nephritis	12 months	? ?	109	none	Severe Headache. Sleeplessness Mental Delusions Unconsciousness at times No Vomiting Never	Pulv Jalapae Co 3ij o n Tabellae Trinitroglycerini T t d s - quite relieved headache	Greatly relieved	27.94 to 26.7.94.	H.W 243
49	Sarah P 27	Chronic Tubal nephritis	2 months	100-104 0-31	88-0	3-4	Headache Diarrhœa. Vomiting Bed sleep Coma	Succ Ammon Acetat 3ij 3rd hourly Succ Haematoxyli Co 3ij doses — stopped diarrhœa Acid Hydrocyan dil ℥ iij — stopped vomiting Succ Copaib Resinos 3ij t d s — did not increase urine. The symptoms were relieved, general condition got worse When very bad Hot Bath 110° F relieved him for a short time; the sweated freely Afterwards he was again roused temporarily by a poultice. Cataplasm. Sinapis (Mustard 1 in 8) over heart, but only a few minutes he then sank & died		1894	P.S. 248

Passim.

Hurrah! Long live the King! Our august President has graciously consented to become our Patron. The world of Guy's is accordingly uplifted, and hastens to tender to His Majesty its respectful gratitude for this continuance of the royal favour, and to assure him of its devoted loyalty to his person, his Consort, and the Royal Family.

His Majesty has shown himself such a strenuous champion of the cause of charity, and has rendered such signal service to our hospital during his term of office as President, that our hopes must ever be for his happiness, our prayers for his safety. We trust that before long the King may be able to visit us again, in order that we may by our acclamations show His Majesty in some slight degree the gratitude that we feel in our hearts.

H.R.H. the Duke of Cornwall and York has been elected to the office of President of the Hospital. May it be a case of "like father, like son." His Majesty the King has been a great President; the Duke, His Majesty's successor, will, we know, fill the office with no less honour.

We offer our hearty congratulations to Mr. Fripp and Dr. Washbourn on the decorations conferred on them for distinguished services in South Africa. On Mr. Fripp honours have of late been falling thickly, and we may rest assured that his share in the organisation and direction of the Imperial Yeomanry Hospital at Deelfontein was considerable, and duly appreciated in high quarters, to have thus gained for him the distinguished honour of the Companionship of the Order of the Bath. Of Dr. Washbourn's energetic and untiring labours in the field of military medicine we have had enthusiastic reports from many quarters. His knowledge of bacteriology and hygiene must have been of the utmost value during the height of the enteric epidemic in South Africa, and his elevation to the Companionship of the Order of St. Michael and St. George is a well deserved reward, which is appreciated as much by his friends at Guy's as it will be by Dr. Washbourn himself.

Another Guy's man honoured for service in South Africa is Surgeon-Major W. T. F. Davies, of the Imperial Light Horse, who has been made a Companion of the Distinguished Service Order. A member of a well-known medical firm practising in Johannesburg, Surgeon-Major Davies was one of the Reform Committee during the crisis which preceded the Jameson Raid. For his share in its proceedings he suffered imprisonment at the hands of President Krüger. Joining the Imperial Light Horse at the commencement of the war, he went through the dreary siege of Ladysmith, and was a member of the Mafeking Relief Expedition. A brave member of a gallant force, he has well earned the distinction which has been conferred on him.

Although there is still a steady, if diminishing stream of men from Guy's and other hospitals outward bound for the Cape, to replace those returning invalided and time expired, and those who will never return, the original temporary medical and surgical staffs have, with a few exceptions, left South Africa, if not already arrived home. We publish elsewhere a letter from Messrs. Freemantle and Watson, the acting Honorary Secretaries, with regard to the proposed gathering of those who have been on duty either at the hospitals, or attached to the forces. The list of the Committee contains the names of many distinguished members of our profession who have done their country good service in the present war, and the gathering should be a pleasant one, though not devoid of pathos, for those present, while fighting their battles over again will not be unmindful of many an old friend who might have been with them.

With the completion of the new Isolation Wards the following regulation for the care of patients admitted therein comes into force:—"All patients admitted to the Isolation Wards shall be under the care of the physician, house-

physican, and clinical assistants in charge of the Clinical Wards, and in the event of surgical assistance being required, the assistant surgeon corresponding to the physician in charge of the Clinical Wards shall be instructed to see the case." It is to be noted that Isolation Ward is reserved for the reception of cases of laryngeal diphtheria of so urgent a character that their removal to fever hospitals would be attended with grave risks, and that Isolation Ward M is intended for cases of measles with laryngeal or pulmonary complications seriously endangering life.

The value of these wards has been very evident during the present epidemic of measles. The cots have been kept full, and double the number of cases could have been taken, the severity of whose symptoms justified their admission.

There is another addition to the wards which, we hope, will some day receive the attention of the authorities, when times are better, and full coffers will permit of a completely furnished hospital. We refer to the necessity there is for a "Casualty Ward," in which those difficult cases known to the halfpenny press as "Drunk or dying," could be accommodated with a night's shelter instead of either making the night hideous for a ward full of sick folk, or else being relegated to the police cell, and leaving the H.-P. in authority to pass a restless night, disturbed by horrid nightmares of public pillory. Such a ward might be furnished with stretchers, and placed under the care of a male attendant, while, as the diagnosis became clear, the case could be either transferred to another ward or discharged.

With the ample cellar accommodation that exists at the hospital, we fancy such a ward could be constructed at small cost, and its maintenance would not be expensive, while the Resident Staff would gladly extend the field of their labours in return for the peace of mind secured thereby.

Another new regulation as to the signing of death certificates has just come into force, and should save much trouble and annoyance both to those in charge of the case and to the relatives. At the suggestion of the Registrar of Deaths, a book of certificates is now kept by the sister of each ward, and in accordance with the instructions of the House-Committee, it is the duty of the sister, on the death of a patient, to present the certificate to be filled up and signed without delay by the House-Physician or House-Surgeon in charge of the case. When duly signed, it will be handed by the sister to the relatives of the deceased for presentation to the Registrar. Of course, when death is not entirely due to natural causes, no certificate will be supplied, but information of the death will, as heretofore, be given in the Superintendent's office, so that the Coroner may be notified of the facts. No more need the House-Physician's or House-Surgeon's feelings be harrowed by an interview with sorrowing relatives, or his temper ruffled by the demands of the importunate messenger.

Our friends at Balham have not forgotten our needs, for to-night the "New Stagers'" Operatic Society, under the management of Mr. Claude Self, produces Gilbert and Sullivan's opera, "Ruddigore," in aid of the funds of Guy's Hospital. We hope that Guy's men in that neighbourhood will turn up in force at the Balham Assembly Rooms, and that the legend "standing room only" and a hearty reception may gladden the hearts of the management.

The annual lawn tennis fixtures, Past v. Present, has been arranged for the 22nd June, at Honour Oak Park.

Dr. E. W. Goodall, an indefatigable member of the "not long past," is this year arranging the veteran team. He writes to us that he will be pleased if old Guy's men desirous of playing for the "Past" will send in their names to him at the Eastern Hospital, Homerton, N.E., as soon as they conveniently can.

We have been requested by the Hon. Secretary of the Rugby Football Club to remind the secretaries of the various athletic clubs that

there will be a meeting of the "Blues" Committee early in the summer session. The clubs should, therefore, decide at an early date on the names of their members to whom they desire "Blues" or "Half Blues" to be granted, as the case may be, and to send in the same to Mr. Steward, Secretary of the "Blues" Committee.

The prospect of the coming cricket season is a fairly good one. Several particularly good matches have been introduced into the fixture list, and some old favourites revived. Though several of the most prominent members of last years team are unable to play on account of the objectionable five years rule, we think there will be no lack of men to fill up the gaps in our first and second elevens. We hope to have plenty of run getters, but, as in other years, shall probably be short of bowling. Practise at the nets began on Monday, 22nd inst., the ground is in good condition, and plenty of men have turned up already.

The proceeds of the sale of 154 copies of "Wilks' Pathological Anatomy," after paying for binding and postage, amount to £10 13s. This sum will be paid over to the Hospital Sustentation Fund, at the request of Sir Samuel Wilks, to whom our thanks are doubly due—first for allowing us the opportunity of securing a valuable work at small cost, and secondly for a generous donation to the hospital funds.

Wanted! The roof of a marquee, or an awning of some sort, for the balcony outside "Patience" ward. These balconies have proved a boon to the convalescents of the Surgical wards, and the sunshine and fresh air thus provided will, we are sure, assist in no small degree the after-treatment of our surgical cases. Unless, however, some protection from the midsummer sun be provided for the uppermost balconies fronting south, "insolation" will be added to the diagnoses on the bed letters, and the occupants of "Patience" and "Samaritan" will be prevented from leaving the wards until the cool of the evening. Such a risk could be prevented by the use of a little ingenuity, and at a very small outlay.

We have been requested to announce that copies of the photograph of the Dental Society's Dinner can be obtained from Messrs. Fradelle and Young, 283, Regent Street, W.

We have heard so much lately of the so-called "Christian Science" that we should be pleased to learn if the following opinions could be classed under that heading. The article entitled "Experiences of a South African Missionary" occurs in the current issue of *Climate*, a quarterly journal of health and travel. We have no doubt about the Christian principles of the writer, but we fear that his science is sadly at fault. He informs us that he is "not an M.D., only a missionary who has been working twenty years in the tropics (north of the Transvaal), and has had a great deal to do with the malaria." Strong in the convictions gained from such experience, he proceeds to cast doubts on the importance of the mosquito bite as provocative of this disease, and concludes with the following remarkable statement—"My opinion is that those who sleep under mosquito curtains are safe, not because they are not bitten, but because, remaining indoors, they are safer from inhaling the germs, or because, sleeping out of doors, the curtains may be a protection in themselves against the miasma." This brings to our mind's eye the picture of the baffled germs battering their heads against the doors and windows of the missionary's citadel, while the waves of miasma fall back shattered by the bulwarks of a mere mosquito curtain. We feel that the culex pipeus has been much overrated as a manufacturer of malaria, and that the researches of Professors Celli and Grossi, Surgeon-Major Ross and Dr. Manson have been in vain.

The sowing of grass seed was commenced in the rapidly-diminishing park last Saturday. The birds of the air hastened to devour their share, while those on their way to the "Nursery" by no means restricted themselves to treading under foot that which had fallen by the wayside.

A Case of Cerebral Tumour.

By Dr. Bryant.

I report this case in full in order to illustrate a method for permanently recording macroscopic changes in the brain by means of photography. In the post-mortem room at the present time no brains are examined minutely at the time of a necropsy, but they are removed from the cranium and at once placed into special jars containing a one per cent. solution of formalin, which solution effectually hardens the brain substance in about a fortnight. It is advisable to change the solution once or twice. When sufficiently hardened, sections are made either vertically or horizontally, as the case demands. The sections are then labelled in order from before backwards, or from above downwards, according to the direction of the incisions, with small paper labels which are attached by means of small pins. The sections which show any morbid changes are then photographed with their numbers showing plainly. The sections with their numbers carefully pinned to some prominent part of the external surface, are then replaced in their normal positions, and, if necessary, are held together by a piece of cloth or bandage. The whole brain is then photographed (*vide* Photograph No. 1). In this way the position and extent of the pathological changes shown in the various sections may be appreciated. I am indebted to Dr. Perry for permission to publish the clinical notes of this interesting case.

Maude E., æt. 10, was admitted on April 19th, 1899, into Miriam Ward, Guy's Hospital, under the care of Dr. Perry, for wasting and headache. The parents were well, and there was no family history of tubercle or any other disease. She was a full time child, was suckled for fifteen months and afterwards was fed on milk and bread and butter. She was then a fat and flourishing child. When she was five years old she had a fright through a fire, after which she complained of headache, and began to waste away. She was taken to the Camberwell Infirmary, where she remained for a year, and improved considerably. She then went to school until eight weeks before her admission, when she again began to suffer from headache, vomiting and listlessness. All the above symptoms began to be aggravated a fortnight before admission, when she began to cry out with the pain in her head. The bowels were regular. She did not sweat at night. During the few days previous to her admission her mother stated that she had lost the power of speech; she also stated that the left arm and leg became powerless a fortnight before.

Condition on admission.—Temperature 97·6°, pulse 72, respiration 16. She had the appearance of being very much younger than she really was. On April 28th she weighed only twenty-nine pounds. She was lying in bed in a listless drowsy condition, with her legs curled up and with her head on one side. On being spoken to she would open her eyes, answer plainly, and immediately close her eyes again. She rather resented interference of any kind. The left arm and leg were both rigid. The grasp of the left hand was very feeble when compared with the right. There was no loss of sensation. The left knee-jerk was exaggerated and the right was brisk. The right pupil was larger than the left. There was neither strabismus nor nystagmus. She was greatly emaciated, the ribs, sternum and iliac bones all being plainly discernible through the skin. The abdomen was retracted. The liver and spleen were not felt. The tongue was furred and the breath was foul. The chest was badly formed. There were no signs of pulmonary disease. The circulatory system was normal. The urine was of 1030 specific gravity, acid, and contained neither albumen nor sugar. The eyes were difficult to examine, but the report states there was no optic neuritis.

April 21st. She seemed a little brighter and recognised her mother. She had not been sick; she was fed per rectum and given Potass. Iodid. gr. ii. t.d.s.

23rd. She was not so well; she had been a good deal sick and was suffering from hiccough. The right pupil was still larger than the left, and the left arm and leg were rigid.

24th. She was brighter, and the vomiting and hiccough had ceased.

27th. She was drowsier and more apathetic. She could not swallow, and saliva was dribbling from the mouth. Nasal feeding was resorted to. The pupils were noticed to vary in an extraordinary manner, sometimes the left, sometimes the right, being dilated. A few dilated veins were noticed over both temporal regions.

28th. The pupils were more contracted; she swallowed four ounces of milk in the morning.

29th. She took six ounces of milk, and, on the whole, appeared to be a little brighter.

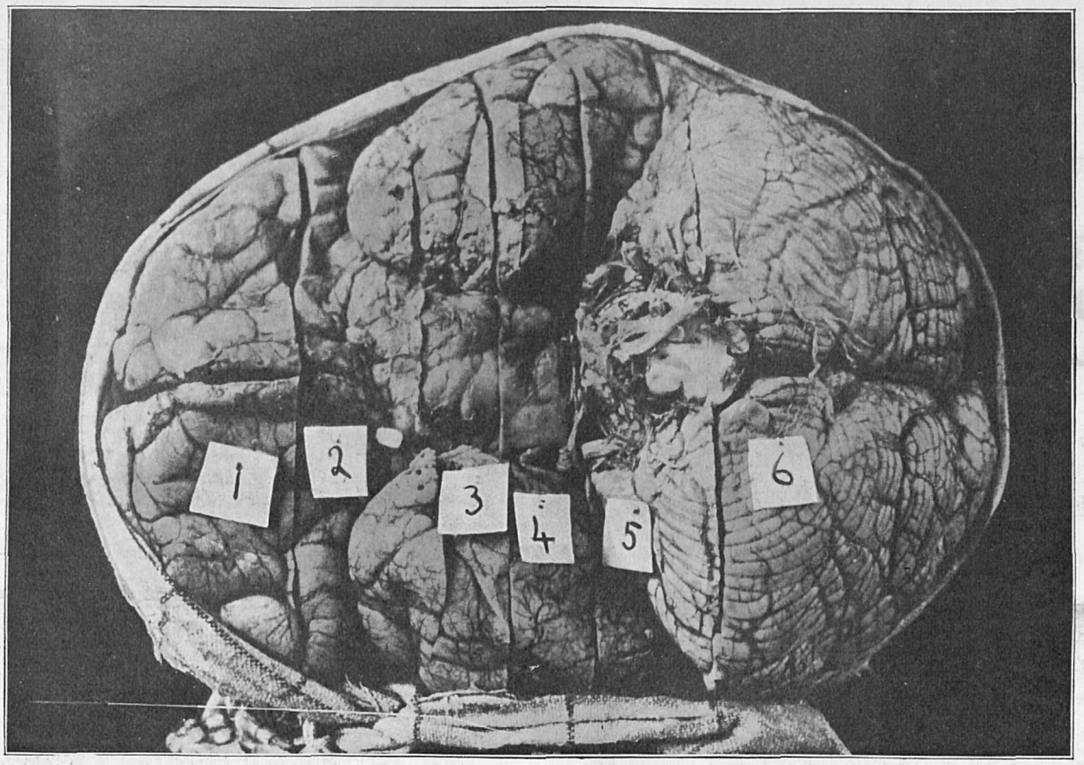
May 2nd. She was weighed and found to have lost four ounces. The discs were again stated to be normal.

17th. At 2 a.m. she had a fit; she jerked her head and eyes to one side, and backwards and forwards very rapidly for about two minutes, the limbs remaining quite still. Some blood-serum gave a negative reaction to the Widal test.

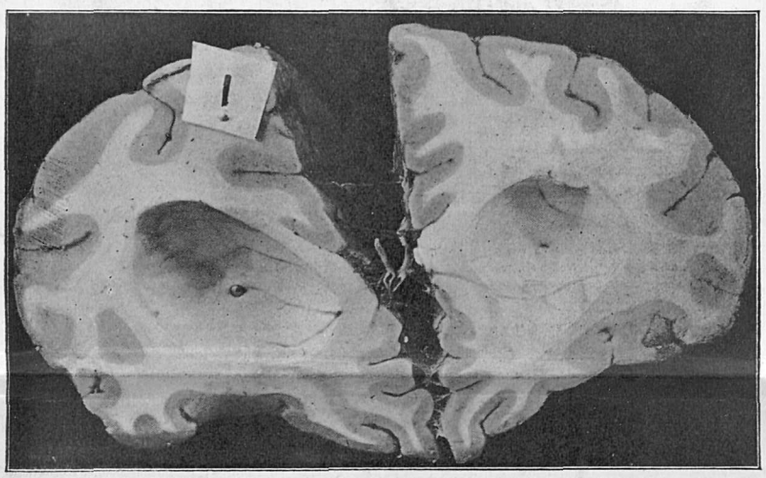
18th. She had another fit-like attack which lasted about five minutes. She took no interest in her surroundings. Slight nystagmus was noticed, and on examining the eyes the retinal veins were found to be dilated. At intervals she was noticed to have curious spasmodic contractions of the lower jaw.

19th. She was much worse; she became very cyanosed and sweated profusely, was rigid in both lower extremities and violently sick. In the evening she had a similar attack, when she put herself into the position of opisthotonos, and the head was extremely extended to the left. Dr. Shaw examined the optic discs and said they showed a condition of consecutive atrophy. The temperature was 103°.

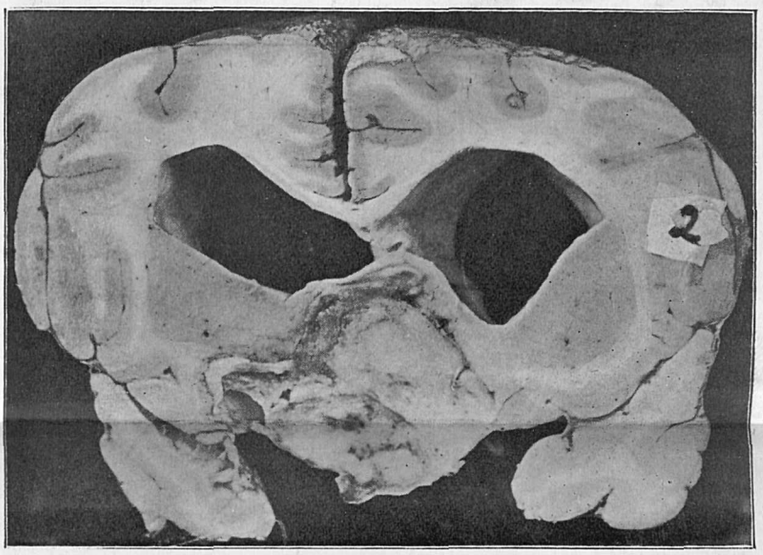
21st. At 3 a.m. her temperature suddenly rose to 105·8°. The pulse was 148, and the respiration rate 24.



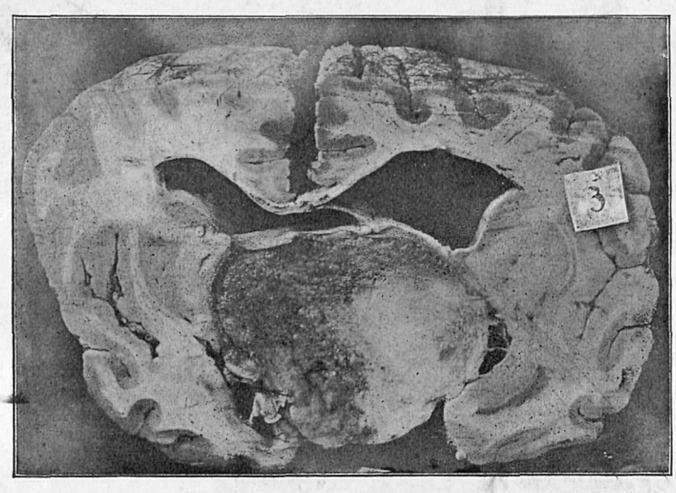
PHOTOGRAPH No. 1. (Base of Brain).



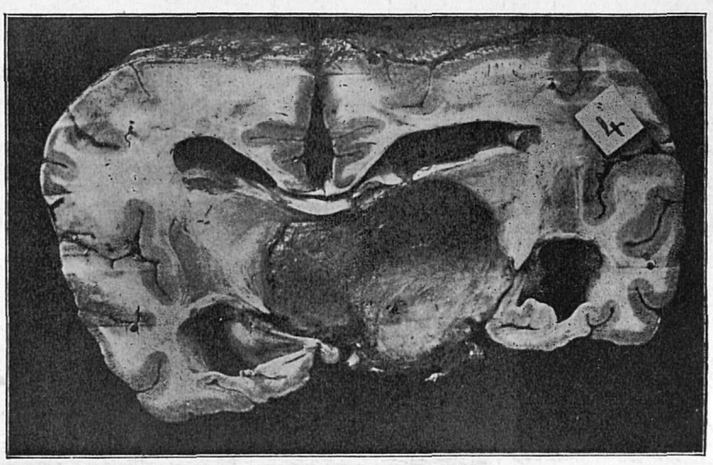
SECTION 1. (Posterior aspect).



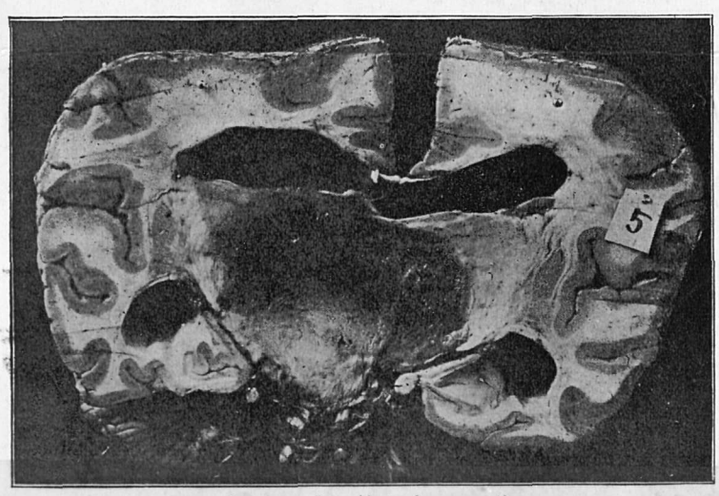
SECTION 2. (Posterior aspect).



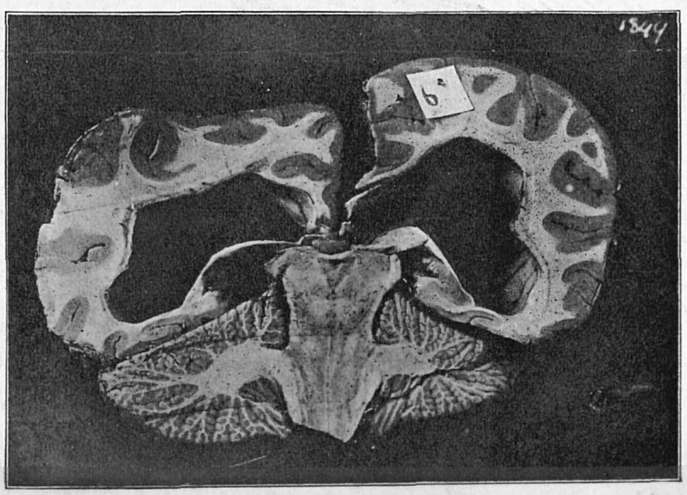
SECTION 3. (Posterior aspect).



SECTION 4. (Posterior aspect).

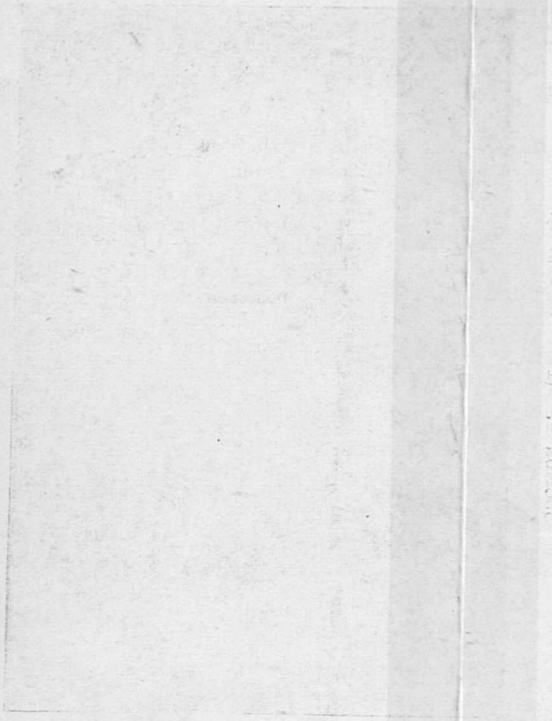


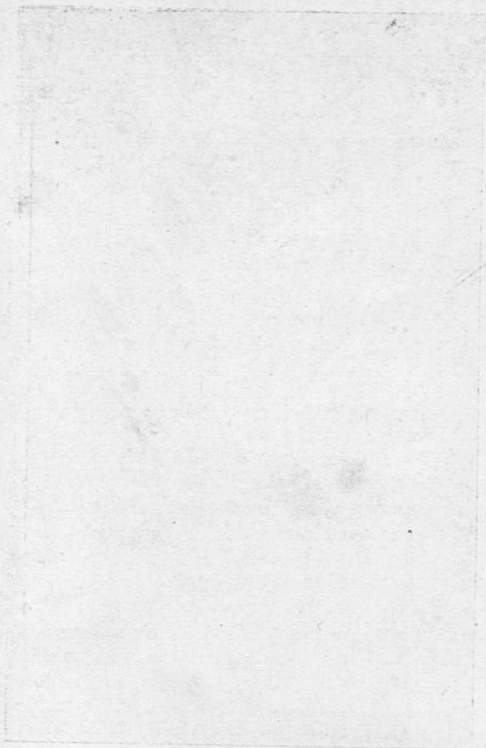
SECTION 5. (Anterior aspect).

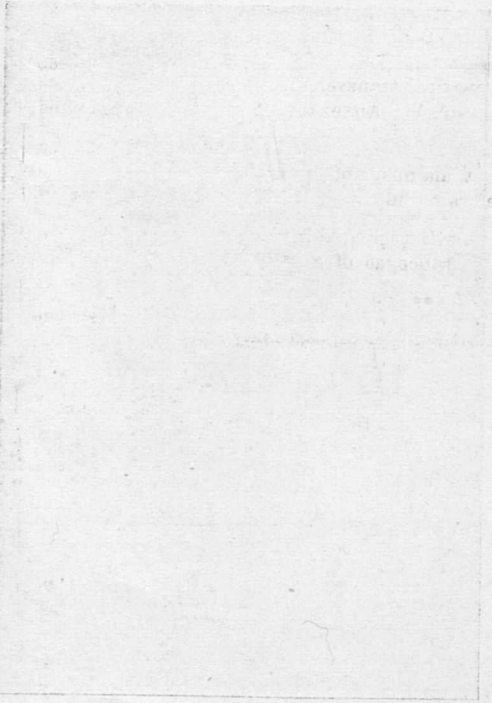


SECTION 6. (Anterior aspect).

A CASE OF CEREBRAL TUMOUR.—BY DR. BRYANT.







Both sides were rigid, but the left side more so than the right. Nystagmus was still present. At 11 a.m. the right pupil was larger than the left and she was quite comatose. At 6 p.m., she had another attack of opisthotonos; the pupils were small, equal and fixed. The temperature was 103·4°. Tache cérebrale was present.

25th. There was conjugate deviation of the eyes to the left.

27th. Ptosis of the left upper lid was noticed. The temperature was 99°.

29th. The ptosis was not so well marked.

30th. She was much worse. During the last few days she appeared to have become much more wasted. Tracheal râles were heard. The pulse was barely perceptible at the wrist, and she gradually sank, and died at 10.50 a.m. on the 31st, the heart ceasing before the respirations. The case was diagnosed as cerebral tumour.

The necropsy was performed four hours after death. The body was extremely emaciated; it weighed only twenty-three pounds (10432·8 grammes).

The brain weighed 1417·5 grammes. There was no meningitis. A greyish tumour was found at the base of the brain extending from the pons varolii posteriorly (but not involving it) to the olfactory tracts, on which it pressed. The surface measurements of the tumour were longitudinally 4 cms., transversely 3 cms. The optic nerves and tracts were lying above the tumour and so also were the third nerves. They were both much pressed on. Posteriorly it also pressed on the crura, especially the right, but did not appear to involve them. From an external superficial examination it was impossible to determine the origin of the growth. The brain was hardened in 1 per cent. formalin for fourteen days. Six vertical transverse sections were then made (*vide* photographs). An examination of these sections showed a large spherical growth, which could be shelled out from all the adjacent parts with the exception of the right optic thalamus, and from the appearance of this part of the brain and tumour I should say that without doubt the growth originated in this region, for here there was an appearance as of a gradual shading off from normal brain-tissue to a hard, light-greenish grey, semi-translucent looking new growth. There was hæmorrhage into the growth in places, especially in the posterior left and upper part. It appeared to have grown downwards, then to the left, and then upwards and forwards, so that the base of the brain, from the pons to the olfactory tracts, was formed by the tumour. The interpeduncular space, optic tracts, and nerves and third nerves were pushed upwards and pressed on. The photograph of Section—

1. Shows the dilated anterior cornua of the lateral ventricles, no part of the tumour being visible.

2. Shows the tumour in the posterior aspect of the section, it measures 4·8 cms. in the transverse, and 4 cms. in the vertical diameter.

3. On the posterior surface of this section, the tumour measures 5·5 cms. transversely and 4·5 cms. vertically. In the upper and left part some slight cystic degeneration was found, the cysts being very small.

4. On the posterior surface of the section, the tumour measures 5 cms. transversely and 4 cms. vertically.

5. On the anterior surface of the section, the tumour measures 5 cms. traversely and 4 cms. vertically.

6. On the anterior surface of this section and the posterior surface of the last section no part of the tumour was visible, but the posterior cornua of the lateral ventricles showed enormous distension.

On examining the sections it was seen how the tumour had pressed upwards and had obstructed the iter, causing the very marked distension of the lateral ventricles. Sections 3 and 4 showed the right half of the tumour to be of a dull yellowish colour more like brain substance. Its consistence, however, was much firmer and tougher than normal brain substance. The rest of the tumour was of a greenish grey, semi-translucent appearance. There was no pleurisy. The upper lobe of the right lung was œdematous; both lungs were much congested. The larynx, trachea, bronchi, diaphragm and mediastinum were healthy. The heart weighed 85·05 grammes and was healthy in appearance. The arteries and veins were normal. The mouth, pharynx, and œsophagus were normal. The mucous membrane of the stomach was ecchymosed. The intestines, gall-bladder, pancreas, and lymphatic glands and suprarenal capsules were normal. The liver weighed 623·7 grammes; the spleen, 21·25 grammes, and both were healthy. The kidneys weighed 113·40 grammes, the superficial vessels were dilated, otherwise they were normal. Microscopical sections of the tumour showed it to be a gliosarcoma.

Open Air Treatment in London.

The "Open Air Treatment" of Phthisis has been so closely associated in one's mind with residence at some specially selected resort, that it is interesting to note that considerable success has attended experiments of this kind in London itself.

It has not only been on the breezy heights of Hampstead that phthisical patients have shown marked improvement, but also in the somewhat concentrated atmosphere of London, amid the river fogs of Westminster. The *St. Thomas's Hospital Gazette* gives interesting details of two cases, and mentions a third, which have been spending the past winter on the balconies of the hospital, only coming into the ward to be examined. Tarpaulin screens have been put up on stormy days, according to the direction of the wind and rain, the beds being covered, if necessary, by mackintoshes, but otherwise quite exposed to the weather. Warmth has been secured by gloves, and cap, plenty of blankets, and hot bottles if required, while the patients have been induced to take as much food as possible without upsetting their stomachs.

Now as to results. The first case under Dr. Mackenzie had marked physical signs, dulness over front of right

side of chest, impaired resonance in the upper part of the axilla, and signs of cavitation. He was losing flesh and suffered from hæmoptysis. On August 6th he took up his residence on the balcony; for the first month there was little or no improvement, the temperature kept up, and there was hæmoptysis. After about a month, however, he began to improve. There has been no hæmoptysis. Since September 14th he has gained two stones in weight, his appetite is good, and the sputum has diminished in quantity and become less offensive. This patient has been out all the winter, during fog, snow, frost and stormy weather, but in spite of these conditions he prefers sleeping outside to coming into the wards.

A second patient, under Dr. Hawkins, had physical signs of phthisis at both apices. He began the open air treatment on January 2nd, and is now described as a "new man," having become fat and rosy, and only complaining of the "stuffiness" of the ward when he comes in to be examined. As to the third case, also under Dr. Hawkins, it is too soon to say much, but she is said to show some improvement. These cases, showing improvement in their accustomed city atmosphere, appear to us more valuable than dozens of "cures" who have been sent to mountain health resorts. They would also seem to show that improvement is due, not so much to improved climatic influences, which must of course be of special value, as to removal from the evil effects of indoor life.

If this can be accomplished at our sister hospital by the river, could we not obtain similar results in the Borough, where the hop laden air might possibly be especially curative. We would not encroach on the new balconies which find such favour with the inmates of the surgical wards, but there is ample space in front of Philip, there are plenty of old beds being turned out of the wards, and tarpaulin screens could be had for the asking, while there would be no dearth of cases willing, we imagine, to submit themselves to such a course of treatment.

Nursing News.

Matron's Office.

On April 17th, Nurse Whiteman left the hospital on completion of her three years' training, to take up work at the Guy's Trained Nurses' Institution. Probationer Lord has been appointed to succeed her as Head Nurse in Martha ward.

On April 18th, Probationer Durant left the hospital on completion of her three years' training.

We are pleased to announce the safe return from the War of Miss Fisher (Lady Superintendent of the Yeomanry Hospital) and Nurse Tillott of the Guy's Institution.

Pass List.

University of Durham, April, 1901.

First Examination for the Degree of Bachelor in Medicine.

(Old Regulations.)

Chemistry with Chemical Physics.—J. G. O. H. Lane.

Final Conjoint Examination, April, 1901.

(Unofficial.)

Medicine and Surgery.—D. G. Greenfield, *L. Hirsch, *T. A. Matthews.

Medicine only.—*J. Atkins, *E. C. Bevers, *T. H. Body, *G. G. Davidson, J. A. Glover, *E. F. G. T. Heap, *E. T. Jensen, T. T. Kelly, *D. L. Morgan, R. S. Roper, E. Stott, A. R. Thompson, *N. F. Ticehurst, *E. G. Wales, *F. D. Welch, *G. T. Willan.

Surgery only.—J. A. Andrews, W. H. Brailey, *A. E. Cawston, G. S. Graham-Smith, A. D. E. Kennard, H. K. Lacey, *P. S. Mandy, G. H. H. Manfield, *S. J. Ormond, H. G. Rashleigh, W. M. Robson, *E. Shelton-Jones, A. W. Soper, *P. H. Ward, M. D. Wood.

* Denotes completion of the Final Conjoint Exam.

Second Conjoint Examination, April, 1901.

H. O. M. Beadnell, A. R. Beaumont, J. H. Clatworthy, J. Cook, J. W. Dadd, R. Felton, F. G. Goble, C. E. Iredell, A. E. F. Kynaston, M. G. Louisson, W. T. P. Meade-King, B. Moiser, R. Moyle, J. McF. W. Pollard, A. E. Rowlett, G. Russell, J. E. Spiller.

First Conjoint Examination.

Part I.—Chemistry.—S. C. Brown, A. H. Clough, V. A. P. Costobadie, W. C. M. Dickey, A. W. Eyles, J. S. Francis, G. F. Greening, E. C. Lowe, H. V. Mitchell, T. Norman, J. E. Scales, L. D. Stamp, H. F. Wight.

Part II.—Practcial Pharmacy.—J. Bromley, C. M. L. Cowper, G. W. C. Hollist, H. Johnson, A. D. E. Kennard, F. E. Welchman.

Part III.—Elementary Biology.—S. C. Brown, R. B. Dawson, W. C. M. Dickey, A. W. Eyles, W. Floyd, G. F. Greening, J. E. Hodson, R. P. Lewis, G. Wacher, S. M. Wells, H. F. Wight.

Royal College of Surgeons of England, April, 1901.

PRELIMINARY SCIENCE (L.D.S.) EXAMINATION.

F. Barkshire, T. Burton, H. J. Fox, A. L. Mathews, E. O. Stevens.

Royal College of Physicians of Edinburgh, April 14th, 1901.

EXAMINATION FOR THE MEMBERSHIP.

George Norman Meachen, M.B., B.S., L.R.C.P. Lond., M.R.C.S.

General Court of Governors.

Extract from the Minutes of a General Court of Governors, held on Friday, April 12th.

The Treasurer informed the Court that His Majesty the King had graciously consented to become Patron of the Hospital, and moved the following resolution thereon, the same being seconded by the Rt. Hon. Lord Aldenham, viz.:—

That this Court hears with the greatest satisfaction that His Majesty has graciously accepted the office of Patron of this Hospital, and hereby begs to tender to the King its most respectful and hearty thanks for the continuance of His Majesty's valued influence and support to this great charitable institution.

Resolved further, that this Court desires to place on record its high sense of the most important services rendered to this Hospital by the King during the time His Majesty occupied the office of President, and humbly begs His Majesty to accept an expression of sincere gratitude from the Governors now assembled in General Court, for the deep interest he has been pleased to display in the general welfare of the Hospital and its Medical School.

Ordered, that a copy of the above resolutions be extracted from these Minutes, and, having been signed by the Treasurer and the Clerk of the Hospital, be forwarded to the King's private Secretary, for presentation to His Majesty.

An acknowledgment of the above has been received by the Clerk in the following terms:—

Marlborough House,
Pall Mall, S.W.,
14th April, 1901.

Sir,—I have had the honour of submitting to the King the copy of the resolutions which you forwarded to me from the General Court of the Governors of Guy's Hospital, and I am commanded by the King to request you to inform them in reply that he sincerely appreciates the kind and complimentary terms in which they allude to the services rendered by him to the Institution during the time he was their President.

I am, Sir,
Your obedient Servant,
(Signed) FRANCIS KNOLLYS.

The General Court on the same day unanimously elected H.R.H. the Duke of Cornwall and York to the office of President of the Hospital.

Correspondence.

To the Editor of Guy's Hospital Gazette.

Gathering of African Civil Surgeons.

Sir,—A desire has been generally expressed by men recently serving as civil-surgeons in South Africa to hold a dinner. Derby-day, Wednesday, June 5th, the anniversary of the occupation of Pretoria, is suggested for the purpose. It is proposed to include all civilian medical men, whether attached to the R.A.M.C. or to private hospitals. Sir W. MacCormac has consented to preside, and the following surgeons have already expressed their intention of being present:—Mr. Makins, Prof. Chiene, Mr. Watson Cheyne, Sir Wm. Thomson and Mr. Fripp.

The following provisional committee has been formed: Mr. Anthony Bowlby, Chairman of Committee; Messrs. C. S. Wallace (St. Thomas's) and E. A. Houseman (St. George's); Dr. A. Conan Doyle (Edin.) and Messrs. J. F. R. Gairdner (Glasgow and Leeds) and E. L. Hunt (Dublin).

We shall be glad to receive suggestions at the following address, and hope to publish details at a later date.—We remain, Sir, yours faithfully,

C. GORDON WATSON (Bart.'s).
F. E. FREMANTLE (Guy's).
Acting Secretaries.

39, Moore Street, Lennox Gardens, S.W.
April 24th.

From the Gazette's Special Pathologist.

Directions to be followed in sending *Diphtheritic Membrane*:—Remove as much of the membranous exudation as possible with a pair of forceps, which have been sterilized by boiling water. Place the exudation in a small, perfectly clean empty bottle, with a well-fitting glass stopper, and forward without delay. No preservative fluid should be used. The specimen must be accompanied by a Postal Order for 5s. A telegram will be despatched immediately the examination of the specimen is completed.

Diphtheria specimens are to be labelled *Immediate*.

Postal Orders to be made payable to Mr. C. H. Wells.

NOTICES.

E. R. M., Hastings.—Tubercle bacilli were present in considerable numbers.

E. H. G., Amersham.—The Tinea Tonsurans was found in large quantity in the hairs. (1. Dorothy).

E. H. G., Amersham.—The spores of the Tinea Tonsurans were found in small numbers in the hairs. (2. Marie).

PATHOLOGIST.

Tempora Mutantur.

(Concluded.)

In our last issue we reverted to proceedings at Guy's in the comparatively recent past; at any rate, not more than 25 years ago. On this occasion we are enabled, by the kindness of Dr. MacIlwaine, of Redhill, to go back to the ancient history of 1831, as detailed by an observer of that time, who is still living, in good health, and with memory perfectly clear.

Dr. Bossey, a retired medical man who lives at Redhill, is probably the oldest Guy's man now alive. He was born in 1809, and was appointed dresser to Bransby Cooper; his friend Nunelly, afterwards of Leeds, was dresser to Aston Key, and dressed with Dr. Bossey during the operation to which the following report, written at the time by the latter, refers:—

Men who frequent the Pathological Museum, as well as occasional visitors there, will remember an enormous tumour which occupies a prominent position on a table on the ground-floor, while the counterfeit presentment of its unfortunate possessor during life, resplendent in the robes of a Chinese Mandarin, is stowed away in a corner.

We have all heard of the traditions woven round this tumour, and usually more or less embroidered by the enthusiastic first year's man, as he shows his friends the "horrors." Some of us have heard the same mangled stories ingenuously applied to a large specimen of growth in a bullock's œsophagus, which is preserved in a tall jar near by. Faded with age, but beautifully written, and showing evidence of keen powers of observation Dr. Bossey's report is as follows:—

"Hoo Loo, a native of China, 31 years of age, short in stature, rather robust and healthy in appearance, was sent over to this country to undergo an operation for the removal of an enormous tumour, depending from the perineum and pubes, including the penis and testicles, and supposed to be an unnatural growth of the cellular membrane and integuments covering those organs.

"According to the account given by himself through the medium of a Chinese interpreter, it would appear that the disease was not the result of any mechanical injury or venereal affection of the parts—that it commenced as an enlargement and induration of the prepuce—that for four years it was confined to the integument of the penis, and after that period extended to the scrotum, which by its gradual enlargement unsheathed the penis, that organ becoming lost in the substance of the tumour, whilst its integument became spread out as a part of its general covering, except one portion of the prepuce which remained in its former indurated state. It was also ascertained that the progress of the disease was for several years slow and uniform, but of late it had extended more rapidly—that throughout it had been unattended by pain or inconvenience except from its bulk—that he had occasional emissions of semen, and that there was every reason to believe the genitals were unimplicated in the disease.

"When admitted into the Hospital (March, 1831), the tumour extended from the pubes to some way below the knees, its girth at its greatest circumference was 48 inches; its pedicle or root, presented three surfaces, each of which measured 8 inches in breadth, the anterior one extended across the pubic region of the abdomen, parallel with, but at a considerable distance from the horizontal rami of the pubes, the other surfaces corresponded with the fissure between the perineum and thighs, and posteriorly united in a point just anterior to the anus The general form of the tumour was round or globular, but its sides were slightly flattened where opposed to the thighs, as was also its inferior surface or fundus. On its anterior surface the altered prepuce formed a distinct projection of an irregular figure, and beneath this was the opening through which the urine was discharged.

"The skin about the neck of the tumour was healthy in appearance, but that covering its body was very hard and resisting, evidently much thickened and little sensible. On its surface were some small superficial ulcerations, from which a slight aqueous or serous discharge took place. At other parts were small circular or angular depressions, having a reticulated surface and a whiter appearance than other parts. In the intervals between these ulcers and cicatrices were numerous small and hard tubercles about the size of split peas, but scarcely so much elevated; in some parts the little tubercles had a black point in their centre, which probably arose either from obstruction of the orifice of a sebaceous follicle, or from disease of a hair bulb. The tubercles on and about the projection formed by the altered prepuce were larger, more distinct, and harder than in any other part.

"The thickness of the external covering of the tumour prevented the fingers from discovering accurately the nature of its internal structure and the situation of the genital organs embedded in its interior. From an undulatory motion (similar to that produced by striking thick size) extending throughout the whole mass when any portion of it was struck by the hand, it was supposed to contain cysts with fluid, while the history of the case led to the belief that the penis and testicles were not only free from disease, but in or near their usual situations.

"From the time of his admission into the Hospital to the day of the operation his health was uninterruptedly good, his sleep sound, his bowels regular but rather disposed to laxity, his skin warm and freely perspirable, and his appetite keen. His diet consisted chiefly of vegetable food, as rice, bread, tea, &c., with occasionally some fish, meat, milk, &c. His disposition seemed unusually cheerful, and he appeared to anticipate the operation with calmness and confidence."

It will be remembered that the extensive operation necessary for the removal of this tumour was performed in the pre-anæsthetic days, and we fancy we are correct in saying that the unfortunate Chinese gentleman, who had anticipated his terrible ordeal with such fortitude, did not long survive t shock caused thereby.

Notices.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

Notice Concerning the Walker Prize.

The late Mr. Charles Clement Walker having entrusted to the Royal College of Surgeons of England a sum of money for the foundation of a Prize, with the object of encouraging the investigation of the Pathology and Therapeutics of Cancer, the Council of the College desire to make known the Regulations relating to the award of the Prize.

It is not intended that Essays should be submitted in competition for the Prize, or that those who are anxious to obtain it should be called upon to submit their names as Candidates. It is hoped, however, that the knowledge of the reward which may be obtained, and the distinction which it will confer on its recipient, will prove an incentive to those who are occupied in the study of this disease.

Attention is specially drawn to clause 7, where it will be seen that the Prize is open to persons of all nationalities. The Council therefore trusts that all Medical Schools and Colleges will make it well known in their respective countries by publication or otherwise, and the Council will be glad for information from time to time of investigations that are being pursued in relation to this disease, so that they may be furnished with all that is necessary to guide them in selecting the fittest recipient of the Prize.

The following are the Regulations relating to the Prize, viz.:—

WALKER PRIZE.

1. The Walker Prize shall be awarded for the best work in advancing the knowledge of the *Pathology and Therapeutics of Cancer* done, either partially or wholly, within the five years preceding the year in which the Prize shall be awarded.

2. *The next award of the Prize shall be for the five years ending the 31st December, 1905.*

3. The Prize shall consist of a gift of £100. A document declaratory of the award, sealed with the College Seal and signed by the President, shall be presented with the Prize.

4. The Prize shall be awarded by the Council on the recommendation of a Committee at the Quarterly Meeting of the Council in the April following the expiration of the quinquennial period. The Council shall not, however, award the Prize should they not consider any work deserving of it.

5. The Committee shall consist of five Members, and shall be appointed by the Council not less than one year prior to the date of the award of the Prize. The Committee shall not of necessity be confined to Members of the Council.

6. The grounds upon which the Prize is awarded shall be made public at the time of the award.

7. The Prize shall be open to foreigners as well as to British subjects, and the Committee shall not be restricted in any way as to the selection of persons qualified to receive the Prize, with the exception that Members of the Council shall not be eligible.

S. FORREST COWELL,
11th April, 1901. Secretary.

THE COLLEGIAL TRIENNIAL PRIZE.

Consisting of The John Hunter Medal executed in Gold to the value of Fifty Guineas, or, at the option of the successful author of the Dissertation, of the said Medal executed in Bronze, with an honorarium of Fifty Pounds. The subject of this prize is—"The Pathological Conditions arising from Imperfect Closure of the Visceral Clefts."

JACKSONIAN PRIZE.

The Amount of the dividend, about £12, received from the Trust. The subject for the prize for the present year, 1901, is—"The Diagnosis and Treatment of Bullet Wounds of the Chest and Abdomen."

The subject for the prize for the ensuing year, 1902, is—"Fracture of the Skull: its consequences, immediate and remote, including Pathology and Treatment."

The Prizes are to be written for under the following conditions:—

Candidates to be Fellows or Members of the College, not on the Council.

The Dissertation to be typewritten in English, and the number and importance of original facts will be considered principal points of excellence:—*recited cases to be placed in an appendix.*

Each Dissertation to be distinguished by a motto or device; and accompanied by a sealed envelope containing the name and residence of the Author, and having on the outside a motto or device corresponding with that on the Dissertation.

The Dissertations to be addressed to the Secretary at the College.

The Manuscript Prize Dissertations and every accompanying drawing and preparation will become the property of the College.

Those Dissertations which shall not be approved, with their accompanying drawings and preparations, will, upon authenticated application within the period of three years, be returned together with the papers, unopened, containing the names and residences of the respective authors.

The unapproved Dissertations which shall remain three years unclaimed, with their accompanying drawings and preparations, will become the property of the College; at which period the papers containing the names of the authors will be burnt, unopened, in the presence of the Committee.

The Dissertations for the Collegial Prize must be delivered at the College not later than 4 o'clock, p.m. on the 31st of December, 1903.

The Dissertations for the Jacksonian Prize for the present year, 1901, must be delivered at the College not later than 4 o'clock p.m. on Tuesday the 31st of December next.

The Dissertations for the Jacksonian Prize for the ensuing year, 1902, must be delivered at the College not later than 4 o'clock p.m. on Wednesday the 31st of December, 1902

S. FORREST COWELL,
Secretary.

11th April, 1901.

Appointments.

DECORATIONS FOR DISTINGUISHED SERVICES IN SOUTH AFRICA.

From *The London Gazette*, 19th April, 1901.

A. D. Fripp, M.S., to be Companion of the Order of the Bath.

J. W. Washbourn, M.D., to be Companion of the Order of St. Michael and St. George.

Surgeon-Major W. T. F. Davies, Imperial Light Horse, to be Companion of the Distinguished Service Order.

HOUSE APPOINTMENTS.

The following appointments have been made by the House Committee upon the recommendation of the Medical Committee:—

Obstetric Resident.—Mr. D. P. Watson.

Ophthalmic Assistant.—Mr. A. W. Ormond.

Clinical Assistant in the Aural Department.—Mr. C. H. Fagge.

SCHOOL APPOINTMENTS.

The following appointments have been made by the Treasurer upon the recommendation of the Medical Council:—

Clinical Assistants in Medical Wards.—Messrs. J. Atkins (Dr. Taylor); H. Davies-Colley (Dr. Hale-White); H. K. Lacey (Dr. Pitt); E. I. Claxton (Dr. Perry).

Clinical Assistant in Surgical Wards.—Mr. R. D. Smedley (Mr. Jacobson).

Ophthalmic Dressers.—Messrs. J. Evans, F. M. M. Ommanney (May 1st, Mr. Higgens); J. W. Gromitt, A. J. Urquhart (May 1st, Mr. Brailey); A. W. Gater, R. C. Lawry (June 16th, Mr. Higgens); G. T. Collins, T. T. Kelly (June 16th, Mr. Brailey).

Surgeons' Dressers.—Messrs. G. B. S. Soper, G. W. C. Hollist, M. C. Wetherell, F. J. Turner, F. M. V. Smith, O. B. Travers (Mr. Howse); A. J. Beadel, A. C. Osburn, G. E. Malcomson, E. Faulks, H. T. Palmer, G. T. Wrench (Mr. Lucas); N. N. A. Houghton, L. G. Nash, W. H. Cole, T. M. Smith, A. W. Iredell, J. D. Pearson (Mr. Golding-Bird); P. N. Blake Odgers, F. H. Parker, W. C. Lewis, F. L. Thomas, O. W. Richards, C. J. Pinching (Mr. Jacobson).

Externs.—Messrs. A. C. Ransford, A. D. E. Kennard, W. H. Bowen, A. E. H. Pakes, W. G. Parker, G. F. Humphreys (May); F. D. S. Jackson, S. Child, H. J. Gater, G. Moir, W. A. G. Stevens, T. G. Miles (June); M. Coplans, F. Richmond, M. W. Cohen, A. H. E. Wall, H. P. Wiltshire, H. Barber (July).

CIVIL.

Dr. Justin M. McCarthy is appointed Justice of the Peace for the County of Salop.

Dr. Josiah Court is appointed Justice of the Peace for the County of Derby.

Butcher, H. O. F., M.R.C.S., has been reappointed Medical Officer, No. 2 District, Ware Union.

Ham, B. B., M.D. Brux., L.R.C.P. Lond., D.P.H. Cantab,, has been appointed Commissioner for Public Health, Queensland.

NAVAL AND MILITARY.

Surgeon J. T. M. McDougall, R.N. is appointed to the *Duke of Wellington*, for disposal.

Lieutenant A. J. Hull, R.A.M.C., is posted to Woolwich for duty.

Lieut.-Colonel A. J. Willcocks, M.D., I.M.S., Civil Surgeon, Alighur, North-West Provinces, and Honorary Surgeon to the Governor-General, is permitted to retire from the Service.

Surgeon-Lieutenant G. A. Wright, M.B., Manchester Companies, Volunteer Medical Staff Corps, resigns his Commission.

Births.

DUFFETT.—On April 16th, at Withy Holt, Sidcup, the wife of Henry Allcroft Duffett, F.R.C.S. Eng., of a son.

MANNING.—On April 5th, at Hoddesdon, Herts, the wife of Thomas Davys Manning, M.B., B.S., of a son (Roger Davys).

Marriages.

ASHWIN—PHILLIPS.—On April 10th, at St. Helen's Church, N. Kensington, by the Rev. Forster Ashwin, assisted by the Rev. E. G. Ashwin, father and brother of the bridegroom, Richard Hamilton Ashwin, M.D. Lond., of Market Weighton, Yorkshire, to Mary, eldest daughter of C. B. Phillips, Esq., of Battle Lake, Alberta, Canada.

COOPER—BRADNAM.—On April 10th, at Christ Church, Blacklands, Hastings, by the Rev. A. Hodges, M.A. (vicar), assisted by the Rev. H. Foster Pegg, M.A., Albert Cooper, L.D.S. Eng., youngest son of Edgar Cooper, Esq., to Eveline Jessie, elder daughter of Edwin Bradnam, Esq., J.P.

Death.

LEWIS.—On April 8th, at Cardiff, Ivor Ajax Lewis, M.R.C.S., L.R.C.P., J.P., of Porth, Glamorganshire, in his 53rd year.

Ed.—F. G. G.

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Calendar of Coming Events.

May, 1901.

Sat. 11.—Messrs. Lucas and Lane's take-in; Drs., A. J. Beadel and A. C. Osburn; Cl., J. A. Andrews.
G.H.C.C,, I. v. Brentwood, away.
II. v. Nondescripts, home.
G.H.L.T.C., I. v. South Croydon, away.
II. v. Addiscombe, home.

Mon. 13.—1.15 p.m., Clinical lecture by Mr. Higgens.

Wed. 15.—1.30 p.m., Clinical lecture by Dr. Bryant.
G.H.C.C., I. v. Hornsey, home.
II. v. St. Thomas's, away.

Thur. 16.—Messrs. Golding-Bird and Dunn's take-in; Drs., J. D. Pearson and A. W. Iredell; Cl., J. F. Robinson.
G.H.C.U., Address by Dr. W. G. Kemp.

Fri. 17.—1.15 p.m., Clinical lecture by Mr. Symonds.

Sat. 18.—G.H.C.C., I. v. Surbiton, away.
II. v. Hos.-Scho., home.
G.H.L.T.C., I. v. Blackheath 'A' away.
v. Surbiton, home.

Mon. 20.—Final Fellowship Exam.
1st and 2nd Year's Dental Students Exam., Conservation Room for Prizes, at 9 a.m.
1.15 p.m., Clinical lecture by Dr. Galabin.

Wed. 22.—1.30 p.m., Clinical lecture by Dr. Hale White.

Thur. 23.—Messrs. Jacobson and Fripp's take-in; Drs., W. C. Lewis and F. L. Thomas; Cl., S. J. Ormond.
G.H.C.U., Address by Rev. Hollins.

Fri. 24.—1.15 p.m., Clinical lecture by Mr. Lane.

Sat. 25.—G.H.C.C., I. v. Beckenham.
G.H.L.T.C., I. v. Harold, home.

Guy's Hospital Gazette,

MAY 11, 1901.

Two Lectures on Congenital Heart Disease.

CLINICAL LECTURE BY DR. TAYLOR.

March 2nd, 1901.

I.—PATENT DUCTUS ARTERIOSUS.

GENTLEMEN,—Before dealing with congenital disease of the heart, I must make a few preliminary remarks on heart disease in general. The public, as you meet with them in the form of patients, and also in ordinary social meetings, seem to possess a knowledge of two forms of heart disease: one is the weak heart, and the other is valvular disease. Weak hearts in the public estimation appear to be of very great frequency. One would think that about 50 per cent. of the civilised population suffered from weak hearts. Everybody who has fainted, everybody who has had a little fluttering from indigestion, and everybody who has a little shorter breath than his next door neighbour, is regarded as having a weak heart.

We know that the majority of these weak hearts are nothing more than mere nervousness either on the part of the patient or on the part of the heart. That is to say, they are nervous hearts, they are hearts of which the nervous apparatus, or the muscular apparatus—we will say the neuro-muscular apparatus—is very easily upset by outside causes. I am not in that enumeration thinking of the more severe cases of nervous derangement of the heart, that is, the now so-called tachycardia, whether occurring as an isolated condition or as a part of Graves' disease, or exophthalmic goitre.

The public also knows of valvular disease of the heart in the sense that we know it, as the most important, the most frequent, and the most easily studied of all heart diseases. Valvular disease is what the doctor looks upon as typical heart disease, the real thing. That is what his efforts are very largely directed to understanding, and what our efforts are largely directed to

getting our student's to know about, at least, first of all.

But that is not the whole subject. There are cardiac lesions which are really structural lesions, but which are not primarily valvular and not even valvular at all. Even in a case of valvular lesion, it is only because the valvular defect leads inevitably some day or other to a change of the myocardial structure of the heart, that valvular disease has the importance which it has. And I hope you will never forget that the myocardial changes—hypertrophy and dilatation of the heart—are to be studied as closely as the valvular changes themselves, in order to make clear the nature and future treatment of such complaints.

Now of these structural lesions which are not valvular in origin we may make, further, two classes.

There are, first, cases of perforation or communication between the two sides of the heart independent of the valves. Secondly, there are the various myocardial changes which result in degeneration of the substance and structure of the heart, and also in dilatation of the cavities; for example, fibroid degeneration, fatty degeneration, and adherent pericardium. And there are the dilatations, which may be temporary or permanent, resulting from various poisons, of which alcohol is an important one; and of these we see also frequent examples in various infectious diseases, such as scarlet fever, diphtheria, typhoid fever, and influenza.

The class of these cardiac affections that I propose to deal with to-day is this class of communications between the different cavities of the heart. These communications may be of two or three kinds. For instance, you may have a communication between the two auricles, by an aperture in the intra-auricular septum, which arises always from the persistence of the patent foramen ovale. That is a congenital lesion; it is a foramen that ought to close, and in some cases, does not, and practically its persistence is of very little importance. I think it must be very rare for a patient to die from a patent foramen ovale alone. If you see any case that is recognised as congenital heart disease, do not think of a patent foramen ovale as satisfying the conditions which you see before you. In a certain number of cases of people who die from other diseases, the foramen ovale is found not to be absolutely closed, but it rarely, if ever, forms a lesion which of itself has a fatal tendency. It is sometimes patent in cases where there are other severe lesions, and to that extent it may contribute to the difficulties of the patient during life, or towards causing his death.

Then there may occur also a patent septum ventriculorum. That is much more important, and is also very frequently a congenital phenomenon. It occurs in consequence of the septum ventriculorum, which grows from the apex upwards towards the base, being incomplete, and that want of completeness, though it is often associated and perhaps brought about by other serious valvular lesions during intra-uterine life—that failure to be complete may be the only failure in the heart itself. The deficiency occurs at the upper part of the septum in a space which is known as the "undefended space," a small triangular area between the anterior and the right posterior aortic valve, where the muscular tissue is wanting, and the septum is composed only of translucent fibrous tissue.

It is true that you may also get perforation of the septum, which is generally situated in the same place, in consequence of the lesions of infective endocarditis. For example, vegetations start in some part of the heart, perhaps in the valves only, and then as the valves get ragged in their structure in consequence of the disease, and as they play backwards and forwards, little fragments of infective material come in contact with the walls of the ventricles, and here a lesion is established which may spread to this portion of the septum.

There is another perforation or communication between the two sides of the heart, which is not primarily heart disease, nor strictly at first a cardiac lesion. It is a lesion of the great vessels, but the connection of the great vessels with the heart is so intimate, the way in which aortic disease affects the heart is so well known, and the symptoms and physical signs which lesions of the large vessels produce are so closely mixed up with real cardiac

disease, that I think it is fair to include this particular lesion in the same category. The lesion is a patent ductus arteriosus, or communication between the pulmonary artery and the aorta.

A patent ductus arteriosus is always a congenital communication, resulting from the persistence of a vessel which is normally obliterated shortly after birth. But there sometimes occurs late in life a communication between these two vessels in consequence of the rupture of an aneurysm of the aorta into the pulmonary artery.

These abnormal communications form an interesting group of cardiac lesions which may occupy us some little time.

I have said a word about patent foramen ovale, and I will now take this subject of patent ductus arteriosus. The reason for this selection is that we have a patient in the Clinical ward in whom we have very good ground for supposing that this lesion is present. She is a young woman, aged twenty-five, who has no recollection of having suffered from rheumatism. When four years of age she had scarlet fever, and two years later she was admitted to Hanwell Infirmary, where she was for a couple of years under the care of Dr. Littlejohn. At that time she suffered from shortness of breath, and she has done so ever since. In June, 1897, she was in this hospital suffering from epistaxis, under the care of Dr. Perry, and the epistaxis was cured.

The report stated that "the cardiac dulness was normal. The impulse was in the fifth space one inch internal to the nipple line. There was a thrill in the pulmonary area; a systolic bruit at the apex traceable into the axilla; over the pulmonary area loud systolic and diastolic bruits, especially in the third left space near the sternum, and a rumbling sound extending through both systole and diastole."

After leaving the hospital she married and became pregnant, and was again admitted under the care of Dr. Pitt in January, 1899.

The abstract of the report made at this time is to this effect in regard to the heart. She had "a cardiac impulse in the fifth space, in the nipple line. Marked thrill in pulmonary area continuous through systole and diastole. At the apex a loud systolic rumbling bruit, and a mid-diastolic bruit also of a rumbling character, but softer. In the second right space a soft blowing systolic and similar diastolic bruit were heard. In the third space, one and a half inches external to the nipple line, a loud continuous rumbling persisting through the cardiac cycle." She was in some months, and was successfully delivered of a healthy infant in the hospital.

"After leaving the hospital she kept well for some time and was able to nurse the child, but her shortness of breath occasionally became aggravated, and she had several slight attacks of epistaxis. Ever since December, 1900, the patient has suffered from cough and excessive shortness of breath. She has had a pain in her chest and neck, most marked on the right side, and has been unable to keep her back straight. Her appetite has been bad and she has occasionally been sick. She remained in bed for a month, and has been attended by a doctor. She left her bed about three weeks ago. Last week she had pains in her legs and the breathing became worse. On the 27th of February the pain in the chest became worse, and as she was unable to get her breath she came to the hospital and was admitted."

The report of Mr. F. G. Gibson, my clinical assistant, is to the following effect:—

"She is a thin woman, with an anxious expression. She looks more than her age, and has a dusky tinge about the cheeks and lips. She is most comfortable when propped up in bed, and complains chiefly of pain over the right side of the chest. No œdema or ascites.

"The pulse is rapid, rather irregular, full, bounding, somewhat of an aortic character. Impulse is diffuse and seen in the fifth left space, half an inch external to nipple line, being transmitted upwards to the pulmonary area, and inwards to the epigastrium. A bounding impulse is felt at the apex and also in the third and fourth left spaces, while a thrill, diastolic in time, is also felt over this area. The closure of the pulmonary valves can also be felt, and is of a forcible, clicking character. Cardiac dulness commences above, at the upper margin of the third left rib, and extends

externally obliquely down to the apex, while internally it does not extend beyond the left margin of the sternum. Below it merges into the hepatic dulness. In the third and fourth left spaces, at a distance of one and a half inches from the left sternal margin, a harsh systolic bruit is heard. The second sound is much accentuated, being of a loud thumping character, and it is followed by a roaring diastolic bruit, which sometimes almost reaches the next first sound. The systolic and diastolic bruits heard over this area can be traced in all directions, and are well heard over the aortic, tricuspid and mitral areas, while they are also traceable up to either clavicle, and outwards to the left anterior axillary line. They are not audible behind. The vessels in the neck pulsate forcibly, but no pulsation of the capillaries can be detected, and the fingers are not clubbed."

Here are tracings which were taken of the pulse. You see rather a rapid uprise, and then a rather rapid fall. The pulse has a close resemblance to an aortic pulse, and possibly, therefore, regurgitation has taken place, but the aortic characters of the pulse are not sufficient to make me think that regurgitation *must* be present.

Now, taking into consideration the personal equation of those who have made these reports, and the intervals of time between the observations, there is sufficient uniformity about the reports to show us:—That there is a double murmur, of which the diastolic portion is loud, long, extending right up to the next first sound, that it is heard best and loudest in the left third intercostal space, that the second sound is loudly accentuated, and that there is a diastolic thrill.

In more detail, the sounds are heard best in this particular case at a point of the heart's surface where we do not commonly find the greatest intensification of the murmurs or thrills. It is not the situation of a mitral murmur, or of a tricuspid murmur, or an aortic murmur, and not absolutely the usual situation of a pulmonary murmur. It is nearest to a pulmonary murmur. Secondly, the important murmur is diastolic, of very long duration, so that it seems to run right up to the next first sound, and it has even been thought to cover the whole cardiac cycle.

In addition to that there is a great accentuation of the pulmonary second sound, an obvious hypertrophy of the heart which appears rather to be of the left than of the right ventricle, because the great heaving impulse is in the fifth intercostal space, now external to the nipple, and we do not find any extension of the cardiac dulness over the sternum.

What can such a murmur be? I have said it evades, as it were, the four usual valvular orifices, but it is nearest the pulmonary orifice. Is it a pulmonary murmur? You may get pulmonary murmurs as congenital phenomena and as acquired phenomena, and the pulmonary murmurs you meet with are these: The pulmonary hæmic murmur, which is undoubtedly produced in the pulmonary artery, but the mechanism of which is still an interesting subject for discussion, and I am not going to discuss it here. It occurs in association with anæmia, and sometimes apart from anæmia, but it has an intimate relation either with the condition of the blood or with possible structural changes which defects in the blood bring about. It is a systolic murmur and is heard in the second intercostal space and can be traced up to the left clavicle. That is not the condition of affairs in our present case.

You may get a systolic murmur also as a result of congenital obstruction to the pulmonary artery. When you get disease of the pulmonary artery or valve you get constriction in the passages which lead from the right ventricle into the lung. And you get sometimes a constriction of the infundibulum of the heart. Moreover, you may get valvular stenosis from what is considered to be intra-uterine endocarditis, and sometimes you get constriction of the artery beyond the valves. In all these ways you have obstruction which leads to a pulmonary systolic murmur.

There is one constant occurrence in association with that. If the stenosis or obstruction be at all pronounced, the patient gets the phenomenon of cyanosis developed. The blood is prevented from getting into the lungs and is, in consequence, badly aerated. The right ventricle is dilated

and hypertrophied, the stagnation of the blood by backward pressure, or rather the stagnation from retardation of the circulation is shown all over the body by the congestion of the extremities, and you get clubbing of the extremities, *i.e.*, of the fingers and toes, and blueness of the nose and ears in different degrees in different cases. That is not represented in the present case.

But you may have acquired pulmonary disease, though it is uncommon. You may have pulmonary obstruction with regurgitation as the result of endocarditis, especially in the malignant, or infective, or pyæmic form. This arises from infection with micro-organisms, whose entry into the circulation is sometimes easily explained and at others very obscure. That, I think, we may exclude also in our case. Here is a patient who has been under observation for years. She is twenty-five years of age and knows herself to have been suffering from heart disease at six years of age. She could not have had acute infective endocarditis all this time.

Is there any other form of pulmonary murmur? There is one more. You get sometimes pulmonary regurgitation taking place as the result of the great tension of the pulmonary valvular system in cases of mitral stenosis. A patient who has mitral stenosis, with the usual typical murmur, is found to have the murmur of pulmonary regurgitation in addition, possibly late and perhaps not long before the occurrence of a fatal termination. In such cases you get a diastolic murmur on the left of the sternum. You may doubt as to whether it is an aortic or a pulmonary lesion. You may determine that it is a pulmonary lesion from the position of the murmur to the left of the sternum, instead of on the right side of the sternum where we are inclined to localise aortic phenomena. From that situation in association with a mitral stenosis, and especially if it has been a late development, you may readily infer, from the murmur, that there is pulmonary regurgitation of a structural kind.

I think we may safely say that none of the conditions which I have just described are present in this particular case. So far as regurgitation is concerned, we have in this case an intensely loud pulmonary second sound, which seems to put pulmonary regurgitation out of court. With regard even to pulmonary obstruction, the murmur in this case, whether systolic or diastolic, cannot be traced in the direction in which the murmurs of the pulmonary valves can be traced, that is, it is not traceable up to the clavicle as a loud murmur, nor downwards below the fourth or fifth space in the same way as a pulmonary regurgitant murmur would be. I think, therefore, one may safely infer from the conditions which characterise our case that it is not a case of pulmonary valve disease.

By what other means may a murmur in this situation be produced? So far as a mere systolic murmur is concerned, sometimes an aneurysm of the aorta will produce a murmur in this situation. If you have an aneurysm of the aorta pressing on the pulmonary artery, you can undoubtedly have a murmur which will be in very much the same situation as the murmur in this case. If you have a murmur just at that third intercostal space which does not confound itself in any kind of way with either of the four valvular orifices you should always think of aneurysm as a possible thing. But I think we may exclude aneurysm here. First, an aneurysmal murmur is much more commonly systolic than diastolic. Secondly, aneurysms are not common in young women of twenty-five. Aneurysms are not common in young people at all, except under certain exceptional circumstances. You may have an aneurysm, for instance, arising in a small vessel of the brain, in consequence of embolism, in quite young subjects. Boys and girls, of ten to fourteen years of age, having heart disease will sometimes die of cerebral hæmorrhage. They get embolism of the cerebral arteries, then degeneration and an aneurysm occur, and ultimately the aneurysm ruptures and causes the hæmorrhage.

And now, excluding those possibilities, we come back to the idea of a patent ductus arteriosus. Why? Because we know it occurs. Secondly, because that is about the situation where you should get a murmur, supposing any murmur were associated with it. We know that the ductus arteriosus is connected with the

aorta just beyond the origin from the aorta of the left subclavian artery, and goes into the pulmonary artery just at the point of subdivision into its two branches. So that it is just in the intercostal space in that region that we should expect to get any sounds produced in consequence of the patency of this canal. One's experience of other cases shows that it is in that particular quarter that one gets such sounds. The question is whether the sounds in themselves are in any way distinctive. I think that the number of cases of ductus arteriosus that are published is not very large. One of the oldest that I remember hearing anything about, and I saw it myself, was a case published in the "Guy's Hospital Reports," by the late Dr. Hilton Fagge. It is a case that has been well known, and there were certain physical signs associated with it which I will mention presently. There was also a case under my care, in Clinical Ward, in January, 1898, in which we had a suspicion that the patient, a woman, had a patent ductus arteriosus. I may say that I had an opportunity of seeing another case that was attending another hospital, in which the same suspicion was entertained.

Now, with regard to these last two, there has been no post-mortem, so far as I know, and therefore I do not know what the results were and cannot say whether the suspicion was verified. But in Dr. Fagge's case the suspicion was verified, and in the Guy's Hospital Reports, of which I have here a copy, there are pathological drawings which you can look at afterwards, and you will see there represented the patent ductus arteriosus. The title of Dr. Fagge's paper is "A Patent Ductus Arteriosus attended with a Peculiar Diastolic Murmur;" that is, the interesting clinical feature of the case was the character of the diastolic murmur. He says: "On the cartilage of the fourth left rib two loud murmurs were heard, instead of the usual cardiac sound, that with the second sound being of a hissing character, and so prolonged as to continue till the commencement of the next ventricular systole. At this same spot a very considerable purring tremor accompanied the second murmur. The first murmur was of a loud bellows character. Both murmurs were audible as high as the bifurcation of the common carotids, in the back, and over all the upper part of the chest. They did not seem to be peculiarly propagated towards the left subclavian space. At the apex of the heart a single murmur only was to be heard, and this evidently attended, or rather replaced, the cardiac first sound; it could be heard easily down to the ensiform cartilage. At the apex the cardiac second sound was very distinct and quite natural; no trace of murmur. But it is nevertheless true that in their main division the bruit heard by Dr. Wade, and that observed by myself, resembled one another. They were both diastolic in rhythm, prolonged nearly to the commencement of the next cardiac systole, and entirely inaudible at the apex of the heart. Below the fifth rib the second sound, although rather thick and like a thud, is not followed by any murmur. But above this region it is followed by a most remarkable wavy bruit. This wavy bruit is, and always has been loudest about the second left costal cartilage, close to the sternum, and it has at this spot a musical quality, almost wanting elsewhere." He says that at this point the long wavy musical diastolic murmur, that is to say, a sound alternately louder and softer, was the peculiar murmur which he heard in this case, and he further expressed the hope that it might prove to be the well-known characteristic of the lesion.

Well that, perhaps, has not altogether proved to be the case. I mean to say that no one will allow now, from a repeated experience, that every case of patent ductus arteriosus is accompanied with a murmur quite like that in Dr. Fagge's case.

Dr. Fagge quotes from a German author, Kaulich, a case in which there was a murmur which is described as "A prolonged diastolic rasping murmur, most intense above the third rib. There was also a diastolic murmur at the same spot. Over the ventricles, along the aorta, and also over the pulmonary artery a sharp second sound was heard. On post-mortem examination the foramen ovale was patent, as well as the ductus arteriosus, but it appears probable that the diastolic murmur was produced in the latter. No diagnosis was made

during life, although (according to Kaulich) the position and character of the murmur justified an expectation that the pulmonary valves would be found diseased. Other instances have been recorded by Schnitzler, but apparently without any details that would aid in the recognition of future cases."

There is another case that was attending at another London hospital, in which there was a loud murmur heard over the second, third and fourth intercostal spaces and the corresponding ribs, an area about the size of the palm of the hand. In the lower part of that area there was a short, rough first sound, not quite a systolic murmur, and there was a little blowing, harsh diastolic murmur. As you got upwards, that is, over the third rib, the first sound was a more distinct murmur, and the murmur reached closer up to the second sound. Above that there was an almost continuous murmur covering the first and second sounds.

Well, now, I think the impression that most of those who have discussed the subject, or recorded cases of the kind, have arrived at is this: that this patent ductus arteriosus is apt to lead to one of two changes—either a continuous sound which seems to cover both phases of the heart, the systole and the diastole, or there is a long diastolic murmur continuous or wavy, as the case may be. Certainly I think it is clear, though I have not quoted it here, that this waxing and waning character of the murmur has been heard in other cases besides that which Dr. Fagge recorded. And the fact that the second sound is loudly heard—and this case is not the only one in which it has been intensified—renders a simple pulmonary lesion unlikely.

You will say, What, then, is the explanation of that, and why are those murmurs present? That is not easy to say. The systolic murmur, I suppose, is due to the blood flowing from the aorta into the pulmonary artery. Of course the only reason why the blood should flow from the one into the other is that the pressure in the one cavity is greater than in the other. The pressure in the left ventricle is greater than that in the right, and the pressure in the aorta is much greater than that in the pulmonary artery, at any rate during the systole. Dr. Fagge suggests that the occurrence of this diastolic murmur may be attributed to a recoil which might cause higher pressure in the one than in the other. I do not know why the recoil should cause greater pressure than the original ventricular force. I should have thought that the ventricular force might cause a flow towards the pulmonary artery; that when the recoil of this dilated aorta upon its contents takes place the blood would still continue to flow through the abnormal orifice or channel in the same direction, and that there would not be regurgitation. As a result of the heart's action, the tension in the aorta is greater than that in the pulmonary artery, but surely the recoil of the artery cannot be a greater force than the internal ventricular pressure, and for that reason I must confess that I am not quite clear why the diastolic murmur should have been in Dr. Fagge's case, and also in our case, louder than the systolic murmur. In either case the murmur is due to the blood flowing from the aorta to the pulmonary artery towards the pulmonary valves, flowing therefore in the direction of the front of the chest, and coming, as it were, close to the surface in consequence of that. Therefore, that we should hear a loud murmur, and that a vibration should seem to take place underneath the stethoscope, is intelligible enough. But from an anatomical and physiological point of view, I do not see why the diastolic murmur should be much more pronounced than the systolic murmur.

There is just this other point to consider, and I will very briefly mention it, that this other form of communication which we have just noted namely, the rupture of an aneurysm into the pulmonary artery might, one could imagine, help us in some sort of way to work out the clinical relations of a patent ductus arteriosus. They are both communications between the aorta and the pulmonary artery. The conditions of the one are something like the conditions of the other, though you will see that the communication which the patent ductus arteriosus makes is commonly a great deal farther off from the heart than the communication which the ruptured aneurysm makes; and further, that the aneurysm is apt

to be complicated by many other circumstances which perhaps may not exist in the case of the patent ductus arteriosus. For instance, an aneurysm occurring in consequence of pathological changes which have come about in the wall of the artery, is not unlikely to be accompanied with valvular disease. As a fact, many of these cases have been accompanied with valvular disease so as to make any estimate of the relations of the murmur to the pathology of it somewhat difficult to arrive at. I should say that this ruptured aneurysm is of more frequent occurrence than a patent ductus arteriosus.

Some years ago, that is, in the Guy's Hospital Reports for 1883–84, I published a collection of cases, seven of which had occurred in Guy's Hospital and twelve had been recorded elsewhere; the murmurs observed in these cases were as follows: Out of the nineteen there were seven cases with single systolic murmur, six cases with a continuous murmur which seemed to cover both sounds, and six cases with a double murmur. What that seems to show is, that on the whole we must not be too dogmatic as to the exact relation between the physical signs and the conditions which we find; but, taking the case which we have before us I think, from the apparent integrity of the pulmonary valves, from the localisation of the murmur in the particular neighbourhood in which it is found, from the fact that the patient has had it from childhood and it is therefore probably congenital, from the additional fact that she has not got those characteristics of the blood which are seen in the more common obstructive pulmonary disease, that it is highly probable that we have before us the condition which we have specified, namely, a patent ductus arteriosus.

Papers by Guy's Men.

Medical Notes from the Imperial Yeomanry Hospital, Pretoria. By J. W. Washbourn, C.M.G., M.D.—*British Medical Journal*, 20th April.

A case of Sarcoma of the Brain removed by operation: subsequent operation for removal of a second tumour: recovery. By J. M. Clarke, M.D., and R. G. P. Lansdown, M.D.—*Ibid*, 13th April.

In the Medical Wards.

CASE UNDER DR. BRYANT.

CONGENITAL HEART DISEASE.

We have recently had in John ward an interesting case of congenital lesion of the heart. P. D., æt. 4 years, was admitted for pain and dyspnœa. Patient has five brothers and sisters living all of whom are well and strong. According to the parents, patient's condition did not attract their notice till he was a year old. They then noticed that he was short of breath, and inclined to become blue. Patient went on in this way for about two and a half years, and did not become any worse; he was even able to walk and play with the other children. Three months before admission he seemed to get weaker, thinner and more cyanosed, and was very short of breath. During this time he suffered a good deal from diarrhœa, and developed a troublesome cough. Patient's condition gradually became worse till he was brought up to the hospital and admitted.

Condition on admission.—Patient was undersized for his age, and extremely cyanosed. The superficial veins all over body were dilated, and very dark. There was a big network of dilated veins in each upper eye-lid, and to a less extent in lower lids, so that the child looked as though he had two "black-eyes." The fingers and toes were enormously clubbed, and very blue. The lips were purplish in colour, and looked as though the child had been eating mulberries. The penis like the other parts of terminal circulation was enlarged. The chest was rachitic, showing the groove, round the lower part. There was some bulging of chest wall over the cardiac area. The apex beat could be seen in fifth space, and was also felt in third, fourth and fifth spaces, and in epigastric angle, as well as one and a quarter inches outside the nipple line. Cardiac dulness extended beyond the right margin of sternum for one-third of an inch behind the third, fourth and fifth costal cartilages. On auscultation, no bruit was audible. Clear triple sounds were heard faintly over most of cardiac area, but well-marked in second and third space on left side. These disappeared in a few days, and from this time till patient went out only the normal heart-sounds were heard. The blood was almost black in appearance and flowed with great difficulty. A blood count showed red corpuscles 15,462,800 per c.cm., white corpuscles 6,875 per c.cm.

As the blood in above case was taken from the lobule of the ear, it was suggested that a blood count from a congested part would give rise to error. To avoid this the back was punctured and a count made which gave 14,025,000 red corpuscles per c.cm. About three weeks afterwards, just before the patient left the hospital, another count was made by a different observer, and gave as a result 13,300,000 red corpuscles per c.cm. While patient was in hospital he improved considerably, but often suffered from fits of dyspnœa when excited. During these fits he would be semi-conscious for some

minutes, and then gradually recover. The morning wash was sometimes sufficient to produce one.

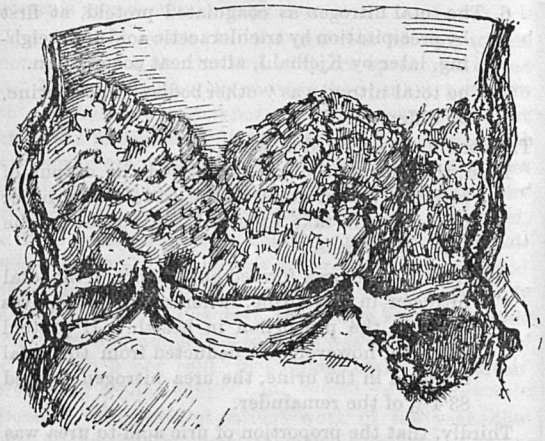
Many heart lesions were discussed, but it was thought generally to be a case of patent septum ventriculorum, with complete obliteration of the pulmonary artery, although there was no bruit.

The chief interest in this case lay in the marked cyanosis of whole body, enormous clubbing of extremities, and the compensatory efforts of nature in producing nearly three times the normal number of red blood corpuscles, to make up for deficient oxygenation of the blood, while the absence of a bruit was accounted for by supposing the septum to be entirely absent, and practically only one ventricle present. J. F. R.

A few remarks upon Rupture of an Aortic Valve-segment.

During a recent lecture upon aortic regurgitation published in the Guy's Hospital Gazette, March 30th, 1901, Dr. Shaw showed a patient whom he considered to be probably the subject of a traumatic valvular lesion. The history of cardiac distress of sudden origin arising during exertion in an apparently healthy young adult is interesting, but, as Dr. Shaw allows, cannot be considered to be conclusive evidence of rupture of a healthy aortic valve-segment.

Examination of a few museum specimens illustrating rupture of a segment of the aortic valve, and perusal of records of other cases suggests that one feature in the morbid anatomy of this condition may have been overlooked. Disease of the aorta frequently results in localised yielding, and it may be rupture of the vessel-wall. There is some evidence that disease of the aorta may spread to the aortic valve, and occasionally lead to the rupture of a segment. This paper is accompanied by a rough sketch of a specimen in the Bristol Royal Infirmary, in which



Rupture of a segment of the aortic valve associated with nodular thickening of the intra-pericardial part of the ascending aorta.

there is limited, but very marked, disease of the aorta, associated with rupture of one of the aortic valve-segments. The disease of the aorta in this case is of the nodular type, a variety which extensively affects the external and middle coats, and is probably distinct from the more superficial affection called atheroma. With this more nodular form of aortitis, thickening of the segments of the aortic valve is commonly associated, and is probably secondary to disease of the aorta. Allowing disease of the aortic valve to be occasionally of the same nature as that which affects the aorta, when one considers how frequently aortitis leads to softening and yielding, followed later by rupture of the vessel-wall, it is easy to understand how so thin a structure as an aortic valve-segment may sometimes give way in the earlier stages of similar inflammation.

As already indicated, there is in the museum of the Bristol Royal Infirmary a specimen which shows rupture of an aortic segment associated with nodular aortitis. In the Guy's Hospital museum is a specimen which shows similar aortitis affecting the sinus of Valsalva, below which an aortic valve-segment bulges some distance downwards into the cavity of the ventricle. Evidently this segment has been affected with an inflammation which has led to softening and yielding before the aortic blood-pressure. There is, so far as I remember, no specimen of rupture of an aortic valve-segment in the Guy's Hospital museum, but examples are present in the museums of the Royal College of Surgeons and of St. Bartholomew's Hospital. In all these specimens, three in number, the aorta is diseased immediately above the valve. Dr. Byrom Bramwell (Diseases of the Heart, page 502) gives an illustration of a similar case in which disease of the aorta is present. It is described as ulceration of an aortic cusp, but the ulceration has healed, and there is no suggestion that infective endocarditis was considered to have been present at some previous date.

Perusal of records of cases of rupture of an aortic valve-segment, shows that the presence of disease of the aorta is invariably mentioned. Balthazar Foster[1 and 2] records three cases, in all of which the aorta was diseased. The same is true of cases recorded by Frew[3], Orlebar[4], and Burney Yeo[5].

One of the cases mentioned in Dr. Peacock's lectures is obviously the same as that from which the specimen in the museum of the Royal College of Surgeons was obtained. It has already been mentioned that in this specimen the aorta is diseased. In the second of Dr. Peacock's cases disease of the aorta is not mentioned, but the same case is recorded in the *Medical Times and Gazette* (1859, vol. i., p. 171), and there patches of atheroma are stated to have been present in the ascending aorta.

1 Medical Times and Gazette, 1872, vol. ii., p. 657.
2 Pathological Society's Transactions, vol. xviii., p. 49.
3 British Medical Journal, 1879, vol. i., p. 936.
4 Pathological Society's Transactions, vol. xxxi., p. 97.
5 Pathological Society's Transactions, vol. xxix., p. 63.

In all the above cases the disease is described as atheroma, and the descriptions perhaps will not permit us to infer that the disease was the affection of the aorta, which shows greater tendency to swelling and softening of the vessel-wall and less liability to calcareous infiltration than ordinary atheroma, and is sometimes described as nodular aortitis. Acknowledging that we must accept the description atheroma in these cases, we have to consider whether the association of such a common disease with recorded cases of rupture of an aortic valve-segment, should be considered merely a coincidence. This it seems to me is hardly possible. Examination of museum specimens of calcareous disease of the aortic valve, a disease generally described as atheroma, will show that the aorta is almost invariably healthy. For the moment I do not remember whether the Guy's Hospital specimens illustrate this point well, but it can be seen in the museums of St. Bartholomew's and St. Thomas's Hospitals, and in the museum of the Royal College of Surgeons. Prof. Clifford Allbutt incidentally mentions in his article on disease of the aortic area of the heart in the System of Medicine, that the specimens of atheroma of the aortic valve in the St. George's Hospital museum, also show little or no disease of the aorta. The fact that in most cases of calcareous disease of the aortic valve the aorta is healthy, strongly militates against the view that the invariable presence of disease of the aorta in cases of rupture of an aortic valve-segment is a mere coincidence.

The form of disease of the aortic valve which is associated with nodular aortitis is liable to another accident, less serious than rupture, which may, however, give rise to cardiac symptoms of sudden onset. This accident is retroversion of one of its segments. There is at least one specimen in the Guy's Hospital museum which illustrates this affection of an aortic valve segment, and its association with disease of the aorta. A few years ago I made an autopsy upon a well-marked case. There was great swelling of the aorta in the first inch of its course, but elsewhere it was healthy. All the valves were thickened, and the left posterior cusp retroverted. The man had been an acrobat, who died about three months after the onset of cardiac distress. Microscopic examination of the aorta showed endarteritis of the vasa vasorum, and extensive small-celled infiltration of all its coats, but especially of the sheath of the vessel, and of the internal and middle coats.

The more severe form of disease of the aorta occurs most commonly in sailors or in soldiers who have been abroad. In Bristol, cases of death from aneurysm of the aorta have occurred in my experience, almost without exception in old soldiers and in sailors. Syphilis with little doubt plays an important part in disease of the aorta. The increased liability of soldiers and sailors to aneurysm may be supposed to be due to a peculiar tendency of the form of syphilis contracted in hot countries to attack the aorta, or we may consider it possible that syphilis in men predisposes to a distinct disease of infective origin, the microbes of which are more numerous or more virulent in the tropics.

It is interesting to point out in connection with the frequency of disease of the aorta in soldiers and sailors, and with the view suggested above, that rupture of an aortic valve-segment is associated with this disease, that in all three of Dr. Balthazar Foster's cases of rupture of segment occurred in old soldiers who had been to the tropics, and one of Dr. Peacock's cases occurred in a sailor who had been to the West Coast of Africa. In the other cases, with one exception, the past history of the men is not referred to, and it is reasonable to suppose that more than one, like Dr. Foster's patients, may have been abroad. The young man shown by Dr. Shaw, it will be remembered, was a sailor, a point of some interest viewed in the light of the above facts.

THEODORE FISHER.

An Abstract of a Research upon the Nitrogenous Metabolism of Bright's Disease.

BY J. A. BUTLER AND H. S. FRENCH.

The patient was a boy aged 7, suffering from sub-acute nephritis in John ward, under the care of Dr. Taylor and Dr. Fawcett. The period of observation was forty-one days, during twelve of which the boy had mild uræmic symptoms.

The estimations made each day were:—

1. The total nitrogen in the food, by Kjeldahl.
2. The total nitrogen in the urine, by Kjeldahl.
3. The total nitrogen in the fæces, by Kjeldahl.
4. The total nitrogen as urea in the urine, by the Mörner Sjoquist method.
5. The uric acid in the urine, by Hopkin's method.
6. The total nitrogen as coagulated proteid, at first by precipitation by trichloracetic acid and weighing, later by Kjelhahl, after heat coagulation.
7. The total nitrogen as "other bodies" in the urine, by difference.

The conclusions arrived at were:—

First, that during the uræmic period the output of nitrogen was in excess of the in-take; at other times the in-take exceeded the output in the urine and fæces.

Second, that the urea formed only 75·6 % of the total nitrogen in the urine, whereas Hopkins gives 86 % as the proportion in health. If proteid nitrogen, however, was deducted from the total nitrogen in the urine, the urea nitrogen formed 83·4 % of the remainder.

Thirdly, that the proportion of uric acid to urea was 1 to 47·5; this is less than 1 to 35, the normal proportion according to Haig; but quite within the limits found in health by other investigators.

Fourthly, that of the total nitrogen in the excreta, 14·7 was in the fæces. This appears to be a higher proportion than is usually found in healthy persons.

During the whole period 356·8 grms. of nitrogen were taken in food, which was chiefly milk, 336·2 grms. were recovered in the urine and fæces.

Review of Annual Report for 1900.

THE Annual Report of Guy's Hospital for the year 1900 provides instructive and interesting reading.

It summarises the progress which has been made since the appeal for funds which was issued in 1895, as follows:—

1 The number of in-patients accommodated per annum has risen from 5,908 in 1894, to 7,320 in 1900. The out-patients have also increased from 88,753 per annum to 124,262 in the same time.

2. A closed Ward (Queen Victoria), containing thirty-two beds, has been restored to use, and a new Isolation Ward, with twelve beds, instituted.

3. Forty-five pay beds have been set free for the sick poor.

4. Most of the older wards have been renovated.

5. Sanitary blocks have been added to the surgical buildings.

6. The Casualty Department has been enlarged and improved.

7. A new and model laundry is nearly completed, and is already working.

8. A central installation for the supply of electric light and power, heat, and water has been laid down, and is in partial operation.

9. A home to accommodate a nursing staff of 250 persons is approaching completion.

The large increase in the number of in-patients accommodated is attributable to the re-opening of closed beds, but, as contributory causes, there must be taken into account the assistance rendered by convalescent homes, the improved and extended nursing service, and the renovation of the wards in keeping with the best hygienic conditions. By the last-named means, the patients' recovery or relief has been, no doubt, expedited, and it is remarkable that while the average mean residence of medical patients was thirty-seven days, a period much the same as usual, that of the surgical patients has been reduced to 19·2 days, the lowest stay on record.

The mortality among in-patients was 19·9 per cent. in medical, and 5 per cent. in surgical cases, or a mean mortality of 9·5 per cent.

Dealing with the out-patient work of the year, the tables of the Report show that the numbers of those attending the special departments were well maintained, and that the casualties and urgent cases again showed a remarkable increase. The total number of persons, exclusive of extra-mural midwifery, and dental cases, treated as out-patients during last year was 90,617, as compared with 85,193 in 1899.

The Charity attended in their own houses 3,413 midwifery patients, many of whom received assistance in the shape of food and clothing through the ministrations of Guy's Hospital Trained Nurses' Institution.

In the Dental Department 11,238 persons attended to have teeth extracted, and there were 18,994 attendances for conservative treatment. This fine record of work is enhanced by the knowledge that service has, as far as possible, been rendered to fit recipients only. The out-patient Visitor interviewed last year 31,555 patients, and only found it necessary to call in question the eligibility of 155 persons, of whom some were afterwards readmitted.

Next as to Finance. The audited accounts are presented in minute detail, and afford food for reflection, for the mighty work done necessitates a huge expenditure. The Hospital received in ordinary income £41,931 17s. 10d., while the total outlay, ordinary and extraordinary, amounted to £94,756 1s. 8d. The ordinary expenditure amounted to £54,123 8s. 8d., or about £6,000 more than the previous year, this increase is the natural result of more beds in occupation, of a larger nursing staff, and the promotion of a higher general efficiency. We cannot here enter into details, but a perusal of the various items shows how vast is the hospital's household, and supports the assurance of the Governors that every proper economy of purchase and distribution is practised.

The extraordinary expenditure of £40,632 13s. has reference to the general building improvements already referred to.

The total of ordinary income, then, left a deficit for the year of £52,820 3s. 10d., and this deficit was met by a transfer of £51,340 7s. 9d. from the Sustentation Fund, and £1,483 16s. 1d. from Capital Account. The Sustentation Fund has been credited with all legacies received during the year except one specially directed for investment; but these not sufficing to fill the void, the Governors were compelled to arrange a loan from the Bank of England. Only £6,230 4s. 7d. was added to the Re-endowment Fund during the year, while with the exception that Annual Subscriptions amounted to £4,021, an amount almost identical with that of the previous year, the Sustentation Fund fared ill, only £2,848 came in the shape of donations, and £13,087 in the form of legacies.

The Governors now ask the public, firstly, to contribute £180,000, to cover the cost of the permanent works in progress, and secondly, to subscribe more freely towards the ordinary expenditure of the hospital until the voluntary support accorded reaches £25,000 per annum.

Help may be rendered in one or more of three forms:—

1. By a donation to the Building Fund.

2. By an annual subscription or donation to the Sustentation Fund.

3. By a donation or bequest for investment in the Re-endowment Fund.

The amount required for the Building Fund is large, but the expenditure is wise and necessary, all the permanent works undertaken being immediately directed to benefit the patients. The Governors state their firm conviction that between the policy of renovation and expansion which they have followed, and the practical extinction of this hospital there has lain no middle course.

The work performed by the hospital, originally a private foundation, stamps it as a public institution of almost unparalleled necessity and importance. The heaviest demands are made upon its ministrations and efficiency, and there can be no lasting alternative between meeting those demands completely, or ceasing entirely to fulfil the trust. In choosing the former course, the Governors confidently anticipate that their policy will continue to receive general approval and encouragement which can best be shown by a generous response to their present appeal.

A copy of the report or any other information will be supplied on application to Mr. C. H. Wells, Secretary to the Treasurer.

The Surgeon's Love Song.

Hear, my love, the inward story, how the image of
your glory causes deep excoriations
On your lover's soul.
(The soul is something too terrific for terms merely
scientific, and I've found no true pontiffic
Definition of the whole.)

Passion fills my heart-blood's plasma when you flash
on the chiasma—such a vision charming as Mer-
édith's sketch of Ormont's wife.
What were life without thee? (ranging betwixt slow
and rapid changing of the molecules' arranging,
Which is what we mean by "life.")

Oh! oris orbicularis, come! contract upon this fairy's;
Let my arm with long palmaris
Hug* her lumbar vertebræ!
While her arytenodei whisper of her love for me, I
strain my feeble subcrurei
As I get up from my knee.

Now, mysterious sympathetic, show emotion energetic
Let the fourth nerve—the pathetic—
Put expression in my eye.
All her cardiac symptoms tally with my own numeri-
cally; so, sweet incus, do not dally,
But repeat my ardent sigh.

The lover's path is strewn with roses. (What is Love?
Is it neurosis?—Vaso-motor?—Brain necrosis?
[*To self*] —What use is all this talk?
Stop your idiot's defining! All too late you'll be
repining: if the maid's in mood declining
Then she'll give you leave to walk.

* Hug.—Vernacular for "come into relation with."

Nursing News.

Matron's Office.

On April 25th, Nurse Goodwyn, Head Nurse in Lydia, left the hospital on the completion of her three years' training, and Nurse G. Allen was appointed to succeed her as Head Nurse.

On April 30th, Nurse B. Baker, Head Nurse in Bright, left the hospital on completion of her three years' training.

On May 7th, Nurse A. Allcock left the hospital on completion of her three years' training, to take up work at the Private Nurses' Institution.

South African Memorial Fund.

(This Fund has for its object the erection of some permanent Memorial in the Hospital to those Guy's men who have fallen in South Africa.)

SEVENTH LIST OF SUBSCRIBERS.

	£	s.	d.
Amount already acknowledged	133	8	6
Captain C. M. Fleury, R.A.M.C.	1	0	0
E. C. Perry, M.D...	2	2	0
W. S. Handley, M.S.	1	1	0
Col. J. S. Wilkins, I.M.S.	1	1	0
W. Carling, M.B....	0	10	0
	£139	2	6

Appointments.

Annis, E. G., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer of Health, Borough of Greenwich.

Clark, J. Kenneth, L.D.S. Eng., has been appointed Demonstrator to the National Dental Hospital.

Grace, Gerald, L.R.C.P. Lond., M.R.C.S., has been appointed Surgeon to the Middleburgh District of the Transvaal.

Lister, Thomas D., M.D. Lond., M.R.C.P. Lond., F.R.C.S. Eng., has been appointed Physician to the City Dispensary, *vice* Ivens Spriggs, resigned.

Pollock, R. G., L.R.C.P. Lond., M.R.C.S., has been appointed Certifying Surgeon under the Factory Acts for the Warlingham District of Surrey.

Robinson, M. E., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer and Public Vaccinator for the Sonning District, Wokingham Union, *vice* B. Brooks.

Sturdy, H. C., M.B., B.S., has been appointed Junior House-Physician to the City of London Hospital for Diseases of the Chest, Victoria Park, E.

Ward, P. H., M.R.C.S., L.R.C.P., has been appointed Civil Surgeon for service in South Africa.

Willan, G. T., B.A., M.R.C.S, L.R.C.P., has been appointed Civil Surgeon for service in South Africa.

Passim.

In another column we publish an abstract of the Annual Report of the Hospital for 1900. Those of us who have been engaged in work at Guy's during the past year must have been impressed by the many important and necessary works which have been commenced and completed, and old Guy's men returning to the scene of their former labours are constantly expressing their pleasure and surprise at the progress made in the renovation and improvement of the hospital. We are now presented with a clear account of the enterprises which have been undertaken, and also with the bill of costs for the work which has been done. This has necessitated an appeal to the public for a sum of £180,000 to cover the cost of the permanent works in progress, as well as for an annual contribution of £25,000 per annum to supply the difference between income derived from endowments and investments and the estimated annual ordinary expenditure on a complete establishment.

Imperial events during the past year have somewhat diverted the streams of charity, and enormous sums have been provided by a generous public towards funds necessitated by affairs abroad. But charity begins at home, and the victims of misfortune and disease must not be allowed to languish because patriotism has made special calls on the resources of the benevolent. It is to be hoped, then, that the confidence of our Governors has not been misplaced, and that, great as are the anxieties of their trust, still greater may be their satisfaction at the support which they shall receive from that public generosity which, when legitimately involved, so rarely fails to respond.

In an appendix to this Report a short account is given of the objects which the Governors have in view in incurring an expenditure, which at first sight appears large, for the remodelling of the installations of light, heat and water, and for perfecting the laundry appliances at the hospital. We must defer notice of this appendix until the exigencies of space allow, for it is too interesting to dispose of in few words.

The *Practitioner* for May notices the publication of Guy's Hospital Reports for 1897. While commenting favourably on the excellent interest of the material, exception is taken to the name of the volume. The editor fails to see why it should be termed a "Report," as he says "the book is emphatically not a report of the work done in the hospital." We beg to point out that such is not its purpose, and claim that the name "Reports" is justified by the fact that, consisting as these volumes do, of papers by the staff, and workers at the hospital, they embody the conclusions drawn from the clinical reports of cases in the hospital wards.

We understand that the present editors of these same "Reports" are fully determined to bring these volumes up to date in the near future. The next number will be published towards the end of June, while it is hoped that another will be ready by December of the present year.

In these times of war, coroner's inquests, and impoverished coal owners, money is hard to get at Guy's, much as we need it and however greatly we deserve it. Under these circumstances it is most gratifying to find that some people are still alive to the needs and virtues of our hospital, and will, unasked, work hard and do their best to help us. For a purely unsolicited piece of kindness in this direction we desire to thank most heartily the "New Stagers Operatic Society" for giving two performances of "Ruddigore" at Balham a fortnight ago, under the management of Mr. Claude Selfe, the proceeds of which are to be given to Guy's. In a purely professional paper such as this, criticism is somewhat out of place; but if we had criticised, our remarks would have contained nothing but praise for a most finished and artistic performance.

A fairly well attended meeting of the Pathological Society was held in the Physiological Building on Tuesday evening, May 7th. With one exception the demonstrations and papers

were either partially or entirely the work of Guy's men. They were of varied type and of great interest. Mr. W. C. C. Pakes discoursed in his usual versatile manner of "A new method of collecting gases produced by bacteria," and of "The influence of the presence of nitrate in media upon the morphology of certain bacteria." His remarks were illustrated by microscopical specimens, and the cover slip preparations showed the typhoid bacillus in such an uncomfortable state of distension that one trembled at the thought of what the societies for prevention of cruelty to animals and the antivivisectionists might have to say on the subject of the forced feeding of the poor bacillus.

DR. FOORD CAIGER spoke of the value of Neisser's stain in the diagnosis of diphtheria, as representing the clinical department in a research of which Mr. Pakes and Dr. Beaton had performed the bacteriological work in the hospital laboratory. Dr. J. W. H. Eyre demonstrated the diagnosis of stains of pneumococci. Dr. Bryant read an interesting paper on "Bacteria in Venous Thrombi," while Messrs. Targett and Swan showed pathological specimens. Finally, Messrs. French and Butler showed the results obtained in their research concerning the "Nitrogenous Metabolism in Bright's disease," of which results a short abstract will be found in another column of this issue. Altogether Guy's was going very strong, and a most pleasant and instructive evening was spent by those who attended the meeting.

IT is with regret that we announce the resignation of Mr. C. E. Groves, who has for the past twenty years been associated with the Medical School of Guy's Hospital. As lecturer in Chemistry Mr. Groves has always been considered "very good value," and the interest he has shown in each individual student has added to his popularity as a teacher.

THE M.D.'s of Cambridge, London and Oxford we know, we appreciate the value of the M.D. (Brux.), which has, we believe, been raised to a considerably higher standard, as far as English candidates are concerned, during the present Boer War. We have a certain feeling of respect for the "M.D. Blackfriars," engendered by the antiquity of its foundation and of many of its diplomates; but in what category shall we place the "M.D. England," which certain gentlemen demand as a style and title in place of the M.R.C.S. England and L.R.C.P. London, which have satisfied so many of the most worthy members of our profession?

IN a circular, anonymous and pathetic in diction, which on the 3rd May was surreptitiously posted up in the smoking-room, conjoint men who "have to pass examinations just as difficult as those of some of the universities," are urgently requested to sign a paper earnestly begging the Royal Colleges of Surgeons and Physicians to grant an M.D. *England* Degree, in place of the present Conjoint qualifications. They ask this because "they find (when too late) that they are seriously handicapped in the battle of life . . . " they feel, forsooth, that "if they had their time over again they would commence their course of training at a university, so as to enable them to start in the world as 'Doctors of Medicine.'"

IT is all so naïve and ingenuous that we can only suggest that the authors might still be young enough to start their careers again, or, at any rate, to doff the swaddling clothes of innocent ignorance and work for the London Matriculation Examination, which is the only real barrier between them and the coveted University course. We notice, however, that some of the signatures belong to gentlemen who have already passed that barrier, and have subsequently dropped out, and now hope to secure for the asking what they feel themselves unable to honourably earn. Some of the signatories, too, appear to be candidates for the L.D.S. We fail to understand their claims to be addressed as M.D.'s of England. Altogether the circular, if not an elaborate joke, is so puerile in tone that we trust it does not emanate from members of our medical school, nor do we think it will receive much support at the hands of representative Guy's men.

The April number of the *Nineteenth Century and After* contains an article on "Doctors in Hospitals." The author treats his readers to a somewhat violent tirade against physicians, surgeons, resident medical officers, and even nurses, although he is inclined to be more lenient to the fair sex than to the mere professional males, and tends to be quite kind to the matron.

The nurse of to-day will be pleased to learn that she is "commonly more cultured than her predecessors of a past generation. She has more book knowledge, and she is more capable generally; but on the other hand, while the very genesis of nursing aptitude may be described as the power of self-sacrifice, her mind is much too filled with the merely selfish aspect of the duties she is performing. She is concerned chiefly with her own advancement; she looks upon the time spent in this or that hospital as employed educationally; and she regards the patients, not illogically, less as sufferers to be ministered to than as 'cases' from which something has to be learned."

We venture to think that the added intelligence of the "new nurse," and her desire to gain education in her profession, tends rather to increase the value of her ministrations to the sick. With increased knowledge and added interest in her "cases" comes an increased power of doing good, and we fail to see why a nurse should be considered selfish because she strives to perfect herself in her duties. Self-sacrifice is none the less admirable because she does not walk with her eyes shut, but attempts to make the most of her powers, and in her present labours to add to her experience.

It seems but a little while since the days when a run down to the grounds at Honor Oak Park was almost like a visit to the country. From the pavilion we saw our expanse of turf backed by fine trees, while the little inn in the distance was respectable by reason of its rusticity. Now all is changed, the trees and inn have given place to a girdle of jerry-built villas and a flaunting public-house; we are oppressed by the encroachments of bricks and mortar, and, to add to our discomfort, a collection of roundabouts, swings and cocoanut shies has established itself at our very gates.

Athletics of all kinds, but lawn tennis and cricket in particular, demand a certain concentration of the mind which becomes impossible in the neighbourhood of a fearful instrument of torture, from whose inner mechanism amidst a series of sibilant and sonorous rhonchi with an undercurrent of borborygmi, there writhes the air of Chopin's "Funeral March." One cannot play a half volley to the languid strains of "I'll be your Sweetheart," any more than one can bowl a decent length ball to the music of "Pay! Pay! Pay!" We trust that the authorities will find a means of abating this nuisance, a continuance of which would rob our ground of much of its attraction.

The cricket season opened somewhat inauspiciously on Saturday, May 4th, with the match against the London County Club, in which Guy's were rather easily defeated. As had been anticipated, our bowling was weak, and it is to be hoped that the men will attempt to improve this, while more keenness is also required in the field.

Old Guy's cricketers who are desirous of playing in the match Past v. Present, on 22nd June, are requested to communicate with F. J. Nicholls, care of Dr. Edwards, Alton Lodge, Woodford Green.

Pass List.

University of Cambridge, April, 1901.

Examination in Sanitary Science.—J. B. Anderson, H. de R. Morgan, S. T. Reid.

Examination for the Degree of Doctor in Medicine.—A. E. Porter.

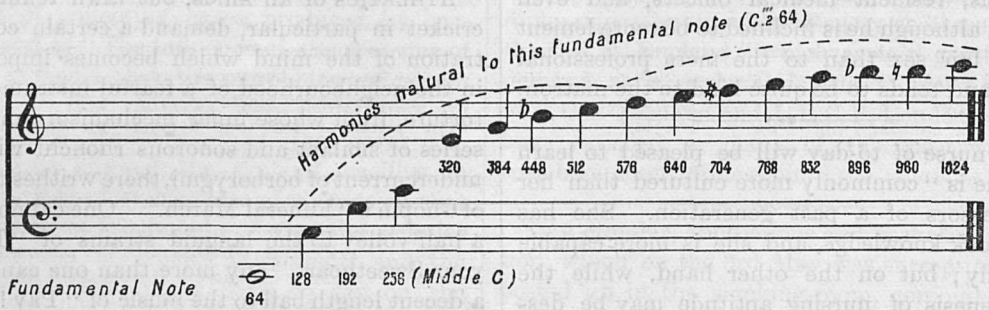
Royal College of Physicians of London.

Examination for the Diploma of Membership.—F. R. B. Bisshopp, M.A., M.D. Camb.

Elected to the Fellowship.—W. B. Beatson, M.D, St. And., J. H. Bryant, M.D. Lond., G. F. Still, M.A., M.D. Camb., W. J. Tyson, M.D. Durh.

The Voice and Speech.

Paper read before Guy's Hospital Physiological Society on 21st March, 1901, by R. LARKIN.



MR. PRESIDENT AND GENTLEMEN,—To-day we are about to consider the mechanism by which voice, the special gift to the so-called higher animals, is produced. The human race is not alone in having a voice, but in speech, by which is meant the faculty of expressing thoughts by articulate sounds, it is almost unique.

For birds, and nearly all animals, with the exception, perhaps, of fish, have their voice registers, but these are not all so musical as that of man. Thus, when a bull bellows, the break or change from chest-voice to falsetto is to be heard, and in the neighing of a horse there is a similar change to be detected. You may notice this also in the barking of a dog, and, by close attention, you may recognise the musical notes which are uttered by birds. Evidently man is not the only creature to whom nature has given the means of producing musical tones. Now this mechanism of voice production is intimately associated with the emotions. The failure of the voice in individuals rising to speak extempore for the first time, or perhaps more generally speaking for the last time, is common enough; and the badly pronounced syllables, and utter loss of control of the excited is well-known. Stammering, a defect which renders one unable to pronounce certain syllables, is much more common in men than women, and the fact that it varies in intensity at different times shows that it is chiefly functional. That the power of the mind is intimately associated with the voice was recorded nearly 2,500 years ago. Herodotus remarks—"We have now to speak of the fate of Crœsus. He had a son, as I have before related, who, though accomplished in other respects, was unfortunately dumb. Crœsus in his former days of good fortune had made every attempt to obtain a cure for this infirmity. . . . . During the storming of the city, a Persian meeting Crœsus, was, through ignorance of his person, about to kill him. The king, overwhelmed by his great calamity, took no care to escape death: but his dumb son, overcome with astonishment and terror, exclaimed aloud, 'Oh man, do not kill Crœsus!' This was the first time he had ever spoken, but he retained the faculty of speech from this time as long as he lived."

The essential mechanism in the production of voice is the larynx. This, in man, is the upper expanded portion of the trachea specially modified by nature for its function. It is placed opposite the third, fourth, fifth and sixth cervical vertebræ, and is not entirely fixed, but allowed a certain amount of movement, such as in deglutition, and nodding movement of the head. Moreover, the size of the larynx varies through life, being proportionately larger in the adult than in the child, and in old age it generally becomes ossified. It is unnecessary to go into the whole of the anatomy of the larynx, but those parts essentially important to its efficient working must be considered. These are the true vocal cords and the muscles acting on them.

The true vocal cord, or inferior thyro-arytenoid ligament, is attached in front close to its fellow of the opposite side to the middle of the angular depression between the two thyroid cartilages. It passes backwards to the lip and the upper border of the processus vocalis of the arytenoid of its own side. It measures, according to Krause, 14–16 m.m., or 1·5 cm., in the male, and 9–11 m.m., or 1 cm. in the female. Its inner border is sharp and free, and covered by mucous membrane in the manner of a very thin layer. Embedded in its anterior extremity is a minute nodule of condensed elastic tissue. The histological characters of the cords are simple. They consist of fine yellow elastic fibres, covered by a stratified epithelium, as contrasted with the greater part of the interior of the larynx, which is lined with columnar ciliated epithelium. The muscles are:—The *crico-thyroid*. This is triangular in shape, and arises on either side from the front and lateral part of the cricoid, and with its fibres diverging, passes obliquely upwards and outwards to the lower border of the thyroid, and to the anterior border of its lower cornu. The *posterior crico-arytenoid* arises from each lateral half of the posterior surface of the cricoid, and its fibres, passing upwards and outwards, converge to be inserted into the muscular process of the arytenoid of its own side. The *lateral crico-arytenoid*, however, is smaller than the posticus, and oblong. From the upper border of the side of the cricoid cartilage it

runs upwards and backwards, reaching the muscular process of the arytenoid. A muscle, termed the *arytenoideus*, fills up the posterior concave surfacees of the arytenoid cartilages. From the posterior and outer border of one arytenoid it passes to the corresponding part of the other. It has two oblique, and one transverse sets of fibres. The oblique fibres pass from the base of one cartilage to the apex of the other, and may blend with the thyro-arytenoid, or aryteno-epiglottideus of the opposite side, whilst the transverse band passes from cartilage to cartilage horizontally. The last muscle is the *thyro-arytenoid*, and as the function of this muscle has been considerably under discussion, you will forgive me for going into its position with greater detail, which I take from Cunningham's description. It is generally described as consisting of an external, and an internal portion. This is really an artificial separation, as the fibres are well blended. The thyro-arytenoideus *externus* lies immediately subjacent to the ala of the thyroid. Its lower border is in contact with the lateral crico-arytenoid, and its upper border is placed at a higher level than the true vocal cord. Its upper part is therefore in relation to the wall of the laryngeal sinus. It arises in front from the lower half of the inner surface of the ala of the thyroid close to the angle, and from the crico-thyroid membrane. It is inserted into the outer border and muscular process of the arytenoid. Some of its fibres pass upwards and backwards to form the aryteno-epiglottideus. The *internus* is a three-sided, and slender band of fibres closely applied to the outer side of the true vocal cord, and hence is prismatic in shape. It arises in front from the angular depression between the two alæ of the thyroid, and is inserted into the outer aspect of the processus vocalis, and adjoining antero-external surface of the arytenoid cartilage. The muscle is thicker at the back than in the front; and this is accounted for by the fact that before it reaches the angle of the thyroid cartilage it has given up many of its fibres to the vocal cords along its whole length. These fibres are termed the ary-vocalis muscle. The larynx is well supplied with blood by the laryngeal branches of the superior and inferior thyroid arteries respectively. The external branch of the superior laryngeal nerve supplies the crico-thyroid muscle, whilst the other muscles are innervated by the recurrent laryngeal. Both of these nerves supply sensory fibres to the mucous membrane of the larynx, but principally the internal branch of the superior laryngeal.

The voice may be defined as the sound produced by the passage of air through the glottis, or chink formed by the apposition without entire contact of the true vocal cords. Dealing with the singing voice first, we notice that in comparison with other instruments of music, it has a peculiar softness, which softness may be ascribed to the yielding nature of the vocal cords.

Just contrast the cords with the unyielding lips of an organ pipe, and the difference will be apparent. We may compare it to a reed organ pipe (in which there is a vibrating tongue), but here the pitch is changed by varying the size, &c., of the resonator, *i.e.*, length of tube. But the human voice is not produced by fixed mechanical means as these, but by changing the length, tension and thickness of the cords. Might we not rather compare it with a brass instrument, such as the bugle, in which the lips of the performer are equivalent to the vocal cords, and can be altered at will. The intensity or loudness of tone produced depends on—

1. The tension of the vocal cords.
2. The expiratory blast.

The pitch of the tone depends on the vibration frequency, and this depends on the length, thickness, tension and elasticity of the vocal cords, and on the expiratory blast. The pressure in the trachea with high pitch may be as much as 945 mm. of water, and with medium pitch 160 mm., whereas with low pitch and whispering only 30 mm. of water. Here a word about pitch seems appropriate. The standard pitch on the continent, also termed the French or classical pitch, is about a semitone lower than that used in this country. We may assume the existence of a note corresponding to the simplest possible rate of vibration—that is one per second—and the various octaves of this note will be represented by two, four, eight, &c., vibrations, and this theoretical note is found to agree so closely with the musicians' idea of the note middle C, that they may be assumed to correspond, and so we get middle C = 256 vibrations per second. This is, no doubt, what should be accepted as the correct pitch.

The quality of the voice depends on the partials, or overtones natural to the tone emitted. Thus if C (= 64) be struck, or bowed on the 'cello, the partials proper to this, and their frequencies are seen in the appended scale. Partials may be explained in this way. A musical sound is generally very complex, consisting of a series of simple sounds called its partial tones. The lowest tone of a series is termed its fundamental, whilst the rest are called its "upper partials." For each vibration given by the fundamental, the upper partials give respectively 2, 3, 4, 5, 6, 7, etc., vibrations. The number of partials is theoretically infinite. Many ears do not perceive the composite nature of sound. Helmholtz's explanation of this is that different partials really excite different sensations in the ear, but whether they are perceived or not depends on the amount of attention given to them by the mind. Helmholtz obtained two nearly simple tones, an octave apart, and by listening to each tone in succession, he was able to detect them when sounding together. But he could only do so for a while, for the higher sound was gradually lost in the lower. This happened even when the higher tone was a little louder than the lower.

The range of the voice is large, and lies between notes having vibration frequencies of 87 to 768, and, in compass, the four recognised voice parts overlap each other between these extremes. McKendrick gives the average lowest note for a bass voice F = 87 vibrations, but you often find that E = 80, D = 72, and even C = 64, can be taken with ease. The difference in range of the soprano, contralto,

tenor, and bass, is accounted for by the difference in length of the vocal cords. Thus, a man's vocal cords may be said to vary with a woman's as 3 : 2. In early life the cords of the larynx in both sexes are of equal length, but on arrival at the age of puberty, in the male there is a rapid growth of the larynx, and lengthening of the vocal cords. The voice then falls an octave, and the cords are about double their previous length. In the female at puberty the length is increased by about a third. Furthermore, by carefully training a man you can enable him to keep his soprano voice; and in case of castration having been performed, as in eunuchs, the subject of the operation retains the voice of his childhood. This shows the association of the internal secretion of the generative organs with the external signs of virility. In old age the upper tones become weakened and disappear. The voice changes owing to a loss of elasticity caused by the ossification of the thyroid, cricoid, and arytenoid cartilages. The range of voice possible is from 42 to 2048 vibrations per second, and the range of hearing is from 32 to 33,768 vibrations, *i.e.*, a range of eleven octaves for hearing as compared with six octaves limited to singing.

Turning now to the muscular mechanism, we note that if the inferior laryngeal nerve be profoundly anæsthetised and stimulated, we have abduction of the cord. If the anæsthesia be slight, we have the same condition. With no anæsthetic at all, we get adduction on stimulation. It is considered that the tonic contraction of the abductors, the activity of which is dependent on a centre in the medulla, is normally stronger than that of the adductors, so that during rest the glottis remains wide open. If the inferior laryngeal nerves be divided, the cords come together and the glottis tends to close. Narrowing of the glottis is produced by contraction of the lateral crico-arytenoids, the arytenoideus posticus, and the external portion of the thyro-arytenoid muscle. The tightening of the cords is produced by the action of the crico-thyroid. This muscle raises the anterior part of the cricoid cartilage, so that its upper part, to which are attached the arytenoids, is carried backwards, and the cords are put on the stretch. The thyro-arytenoid, according to Starling's account can, by means of its external fibres, narrow the glottis, and, by its internal fibres, regulate the tension of the vocal cords. According M'Kendrick, amongst English physiologists this muscle is supposed, when contracting on a whole, to lower the pitch; whilst German authorities favour the view that it raises the pitch. The latter view seems the more favourable, so that the fibres going into the cord (the ary-vocalis) may be considered to have the power of stopping the cords, as the violinist's fingers stop the vibrating string, and cut it up into different vibrating segments. On this theory we may account for the elliptical shape of the glottis in the middle register as being due to the fibres running outwards from their insertion into the cords back to the vocal processes.

(*To be continued*).

In Lighter Vein.

Dear Sir,—As you seem to encourage the singing of the praises of our local heroes in stirring verse (witness a late number of the G. H. G.), I have ventured to add to the list one who is known to perhaps a wider circle than even the gentleman like Apollo, whose views on the aorta have so impressed your Spring poet. My rhymes are, I fear, somewhat like my model's; but I thought a man who could make "daïs" rhyme with "grace" was worth copying, or is he merely a West Countryman?

Apologizing for intruding my ravings on you,—I am, yours truly,

DELIRIUM A. POTU.

THE RETURN OF THOMAS GUY TO THE HOSPITAL.

So entering between the iron gates,
Guy and Æsc'lapius passed the ragged crowd
Of Borough denizens—where each awaits
The chance to see some horror, if allowed
By the grim keeper of those dusty portals—
And gained the steps invisible to mortals.

And through the throng of students who awaited
Impatiently the advent of some surgeon,
Who from great stress of work was oft belated,
They thread their path, and now emergin'
From the great crush, apparently unspotted,
Paused to take breath, when from behind them trotted

One by whose eagle eye they had been seen,
Whose long frock coat enclosed a figure wiry,
Propelled by gaitered legs—whose noble mien
With searching glance betokened keen enquiry.
Swiftly he ran them down; then, with a pant,
Ejaculated, "Hi, there! w-w-what d'ye want?"

Guy turned in anger, "Surely it is hard,"
Said he, "if I mayn't enter mine own door."
"I don't care who you are. Show me your card.
New cases, are you? Then you should come before."
And as he stopped a voice cried, "There's a picter!"
Said Guy, "I'm told that thus he's always Victor."

Papers by Guy's Men.

Case of Foreign Body in the Bronchus: tracheotomy; recovery. By F. B. Judge Baldwin, M.R.C.S.—*British Medical Journal*, 13th April.

Two cases of Severe Frontal Herpes. By C. Higgens, F.R.C.S.

Our Latest Possessions.

Annexation Cruise of H.M.S. "Mildura," in the Pacific Ocean. By Surgeon PERCIVAL M. MAY, R.N.

On September 23rd, 1900, H.M.S. "Mildura," belonging to the Australian Station, was detailed for special duty, which, although not known at the time, turned out to be the annexation of certain islands in the South Pacific Ocean. Our first destination was Wellington, the capital of New Zealand, where we embarked His Excellency Lord Ranfurly, K.C.M.G., Governor of New Zealand, and his Secretary, the Hon. C. Hill Trevor. Mr. Malcolm Ross, correspondent to the *Times*, also came.

We left on September 30th; it was blowing hard at the time, even in Port Nicholson, and when we got outside into Cook's Strait we felt the full force of the gale. The class of ship to which the "Mildura" belongs is decidedly uncomfortable in a gale of wind. Dinner was a very scratch affair for those who summoned up courage to face the meal, or rather what was left of it, as the greater part found a resting place in the waterways, in the journey from the galley to the ward room. Seas broke over both quarters frequently, while at 9 a.m., as we rolled to leeward, a big sea struck the cutter underneath, unhooking the afterfall; before it could be properly secured again, another sea, equally large, carried the boat away altogether, and we saw her no more. We heard afterwards that she had been washed ashore, and this had occasioned some alarm for our safety. After this things quieted down somewhat, but we rolled about no end of a lot for some days after.

On the 5th October we encountered the trade winds, which blew very strongly from the south-east. On Sunday with us, but Saturday, the 6th, on shore, as we lost a day coming up from New Zealand, we arrived at the first of the islands we had to visit and annex, also the largest and most picturesque of any of them.

This is one of the Cook Islands, Rarotonga. The Medical Officer of Health for the Cook Islands, Dr. Craig, came off, and, as we had no infectious or contagious disease on board we were soon granted pratique, and allowed to go ashore.

Rarotonga is a beautiful spot, in the background are lofty hills splendidly wooded nearly to their summits, and sloping down to the sea, where, nestling amongst the luxuriant tropical vegetation, cocoanuts, yams, bread fruits, bananas, &c., the picturesque houses of the natives are dotted, with here and there a larger and more commodious house, denoting the dwelling of one of the European inhabitants.

The following day was a busy one for the engine room department, as we were engaged in coaling, taking in as much as possible, even to a deck cargo, as we had a long journey before us, and no possibility of coaling again until we got to Tonga, one of the Friendly Islands.

Seizing the opportunity, I was early ashore, and hearing that there was a good road around the Island, took my bicycle, eager to get new impressions, and to explore the Island.

The natives are a pleasing-looking race, brown in colour, and well developed; some are dressed in semi-European clothes, others simply wear a highly-coloured loin cloth reaching down to their knees which they call a parui, and a white sort of jersey. Small boys simply wear the parui. The native women are all clothed in brightly-coloured garments, red, pink, or yellow predominating, made somewhat after the fashion of a tea gown. Both sexes are extremely fond of flowers, making them into wreaths, and adorning their heads and necks with them.

I found the doctor busily engaged in his hospital, an airy building close to the shore; there were a few patients in bed, but no serious cases, and all looked very happy. A Rarotongan lady was the matron, a fine looking woman, who took a great interest in her work. She could speak English, as indeed can many of the natives. She presented me with a straw hat of native manufacture, very finely woven, and trimmed with a wreath of beads, instead of the usual band around the crown.

Consumption is prevalent at Rarotonga, although this is rather difficult to believe in such a beautiful climate, and I do not know what explanation to give as to the cause; one reason given seems to be a feasible one. In the old days the natives did not wear, as they do now, cotton clothes, but used to go without, for the most part, simply anointing their skins with oil, which in wet weather prevented them from getting soaked through. Now they use oil no longer, and wear these cotton clothes. When they get wet through, instead of changing their things, they remain in them until they are dry, consequently they are always suffering from colds and chest complaints, which frequently culminate in consumption.

Their remedy for feeling hot, when their temperature is raised, is to run down and sit in the sea, which is somewhat radical treatment, and does not lead to the cure they expect. This was done frequently in the measles epidemic which occurred some years ago in these islands, and led to such terrible mortality. Altogether, however, the natives seem a healthy race, although civilization has made them less hardy. Cellulitis is very common amongst them, especially affecting the lower extremities.

Syphilis is also, unfortunately, far from being rare. Hydrarg. cum Creta, and Iodide of Potassium are favorite remedies, and act like magic in many cases that are not specific. A few cases of elephantiasis are to be found in the island of Rarotonga, but I was not fortunate enough to come across any; it is much more common on some of the other islands.

The natives do not take very kindly to European medicine, often preferring the administrations of their quack doctors, and it is often not until the patient is *in extremis* that they call in the medical officer. When a man is ill, they believe him to be inhabited by an evil

spirit, who must be driven out, the native medicine man is sent for, and when he arrives he proceeds to drive out the offending spirit by practising a very rough kind of massage, which, if the patient is really very ill, is quite enough to put the finishing touch to him. Another favourite plan is to place the lower extremities in hot water, and, in more than one case, the poor wretch has been badly scalded. Malaria is unknown in this island, and there is no beri-beri. Whooping cough is prevalent, but the exanthemata are all absent.

An excellent road about twenty-two miles in length, runs round the island, proving a very good and most picturesque bicycle track, being lined by shady cocoa-nut, palms, bananas, bread fruit, etc., and made beautiful by hibiscus, white, red, and yellow. The only places where the going was difficult was where the road ran down to the beach and somehow lost itself in the sand; here one got peeps of the open ocean, the sea thundering on the reef, and inside the lagoon the lovely green water, peaceful and quiet. At various intervals along the road one came across neat tombstones, with some inscription in native language upon them, showing the resting place of some native, and at two places the road ran through a native village each with its church and school house.

The main trade of Rarotonga and of the Cook Islands altogether, is kobra, and fruit of all kinds, bananas, pine apples, oranges in large quantities, coffee and lime juice. Although there is a large trade in all these, yet, according to the British Resident, Colonel Gudgeon, not more than one-sixth of the Islands belonging to the Cook group are really beneficially occupied. Now these Islands have been annexed, this will be amended in a great measure, and the trade of the Islands improved by advice, general direction, and moral influence.

The authorities under the former conditions of a Protectorate had no power to make any changes, but now all this will be altered for the better.

It may not be known generally what Kobra or Copra (as it is sometimes spelt) really is, it is simply dried cocoanut peel. There are two ways of preparing it. The least common, but some say the best way, is to dry the nut whole. For this purpose nothing but a large house or shed is required in which the nuts may be put. They must be placed upon a floor or stage, so that they do not touch the ground, or else they will not dry, but grow. The husk must not be removed, otherwise the eye in the end would be attacked by the kalulu for the sake of the water they contain, and the air being admitted into the interior the kernel would decay. If unpeeled, and kept off the ground, in three months the water has disappeared and the kernel has become like leather. This is the best kobra, and makes the cleanest and sweetest oil. When it is quite dry the nut is broken and the kernel is cut into pieces, it is then packed into sacks and exported. I may say I did not see any prepared in this way, but in the following method: The nuts are first skinned, then broken into pieces, and the pieces are laid out on matting in the hot sun for a space of three days; at night they are covered over or taken under some shelter to protect them from the rain, as, if the kobra gets wet, it becomes mouldy. In some of the islands the Europeans have sheds, with trucks on rails, on which the kobra can be laid and run out into the sun without any trouble and then, when necessary, run back again. Cocoanut oil is an important article of commerce, being used for the manufacture of stearine candles, also of a marine soap, which forms a lather with salt water. In tropical countries it is much used as lamp oil and as an unguent; also employed as a food.

The following day the ceremony of annexation took place. The Earl of Ranfurly, landing at 1.30 p.m., was received by Captain Baynes, R.N., and officers of H.M.S. "Mildura," the British Resident, Colonel Gudgeon (all in full dress) and a guard of honour by the Royal Marines, a salute of seventeen guns being fired from the ship when His Excellency landed. A bluejacket guard had also been landed, and, preceded by the ship's drum and fife band, had marched up to the Palace and taken station by the flagstaff, where the flag of Great Britain was soon to be hoisted. The natives turned up in large numbers, evincing great interest in the proceedings, especially in the drum and fife band, and making the scene a very picturesque and gay one, with their bright dresses and wreaths of flowers of many colours.

Proceeding to the royal palace of Queen Makea, the Governor was received by the head arikis or chiefs, who walking backwards and exclaiming, "arami, arami, te kawana" ("welcome, welcome, oh Governor"), escorted him to the palace, a large one-storied building faced with white, and with a verandah. Here the Queen was waiting. Then all, with the Queen and Governor in advance, proceeded through what might be termed the royal park to near the entrance, where the flagstaff was situated. Here all the population, the natives in their many coloured garments, and here and there Europeans in white ducks, were gathered.

His Excellency, the Earl of Ranfurly, then made a speech, which was translated into the native language by an interpreter. A proclamation was read, the Union Jack hoisted by Captain Baynes, R.N., of the "Mildura," three cheers given for Queen Victoria (much to the astonishment of the natives), and the islands of Rarotonga, Aitu, Makue, Mitiaro and Takutea, in the Cook group, and the islands of Teanotu and Manua, in the Hervey group, declared part of the British Empire.

Queen Makea, who was dressed in a black silk dress, somewhat like a tea gown, is a very fine woman, with a pleasant expression, and is most intelligent. She wore her jubilee medal, of which she is very proud. The officers of the ship were all presented to her Majesty, who shook hands with them. Light refreshments were provided in the palace in the shape of pineapples, bananas, oranges and cocoanut water. After this the proceedings terminated.

A large amount of fruit, and also a bullock, were sent on board, as presents, and proved very acceptable.

Shortly after the ceremony of annexation had taken place the "Mildura" left for the next Island, Mangaia, some one hundred miles distant (north east of Rarotonga). Travelling on board with us now were the British Resident, Colonel Gudgeon, and Mr. Goodwin, interpreter; we also took the missionary of Mangaia back to his Island from Rarotonga. We arrived there at 5.30 a.m., October 10th (eastern time). Mangaia is the most south easterly island of the Cook group; it is of volcanic origin, and about thirty square miles in area.

The Island is of curious formation, being in terraces, and is very fertile, producing cocoanuts, yams, pine-apples, bananas, and sweet potatoes. Surrounding it is a barrier reef on which the surf dashes with great violence. The natives exhibit great dexterity in shooting the reef in their canoes; it is impossible for the ordinary man-o'-war's boat to effect a landing, so all had to land in native canoes, which are paddled up to the edge of the reef where they wait until the critical moment arrives for the wave to carry them over. All the natives then give a huge shout, and paddle furiously, the canoe and its occupants being carried safely through the breakers into the calm shallow waters of the lagoon beyond.

The Governor with his Staff landed shortly after 11 a.m. and was received with the usual guard and salute. Proceeding to the King's Palace, the ceremony of annexation was proceeded with, and all preliminaries having been duly arranged with the Arikis, or chiefs, the Union Jack was hoisted, the proclamation read, three cheers for the Queen given, and Mangaia declared to be part of the British Empire.

A lunch consisting of sucking-pig, fowls, etc., had been provided by the king, but owing to the shortness of our stay, could not be partaken of. Lord Ranfurly thanked the King and the Arikis, and admired the lunch; this, according to native etiquette, is as good as an acceptance.

The missionary, Mr. Cullen, had a lovely house, with a spacious garden, all well laid out and kept; there was a large church and schools (all native built).

At 2.30 p.m. the "Mildura" left for Aitutaki, shaping a North West course, and arriving there the following day. This Island presents a beautifully green and luxuriant appearance. It is somewhat flat, and is eighteen miles in circumference. It is of volcanic origin, and is surrounded by a wide reef, enclosing a broad lagoon. Near the spot where we were lying at anchor, was a broad channel through which a very swift current was running seawards, and this current is always said to run the same way. The depth of the water in the lagoon varies from quite shallow to a great depth in places. All the coast around is infested with sharks, so that it is dangerous to bathe. At Aitutaki the natives exhibit a great contempt for them, so much so, that when they find a shark under the edge of the reef, they dive down and pass a rope around its body, then they haul him up and get Mr. Shark into the boat. Things now are pretty lively, until the *coup de grace* has been administered, but the natives are quite fearless. One of the Union Pacific steamships, the "Ovalau" was lying at anchor when we arrived, she was being laden with tropical fruit for New Zealand.

This island of Aitutaki was also annexed with the usual ceremony and proclamation by Lord Ranfurly, and the Union Jack hoisted. There being no medical man at Aitutaki, when I went ashore the natives flocked round, bringing their sick for treatment. I did what I could for them in the short time at my disposal, but in many of the cases it was impossible to do anything. One case I was asked to treat was that of an old fracture of the shaft of the ulna. This had happened two months previously, and no treatment had been adopted; union had taken place with a great deal of deformity, a large amount of callus having been thrown out. The limb was quite useless. I could only recommend that the lad should be sent down to Rarotonga for operative treatment. I also saw a well marked case of elephantiasis in a woman (native) aged about 45, affecting the foot, leg and thigh, and also slightly the mammæ. She had always lived in the island, and the disease had progressed very slowly, while her general health was good.

Our next island was Penrhyn, or Tongareva Island, some six hundred miles away. We had been some time in the tropics now, and white uniform, windsails, and (as long as the ice lasted) cool drinks were the order of the day. Most of us with cabins down below found it impossible to sleep there, with a temperature considerably over 92°, and with very little ventilation, so that the poop was generally our resting place. Here one was frequently turned out by the advent of a tropical shower, obliging one to take up one's bed and seek a more sheltered and drier spot.

Penrhyn is a typical example of an atoll, or coral island, which is a somewhat ring-shaped reef enclosing a lagoon. In this island the circuit was thirty-five miles, and the extent of the lagoon twelve miles long by eight broad. There was a navigable channel through the reef available for small craft, this being kept open by the scour of the tide. It may be of interest to quote Darwin's theory as to the origin of these coral islands.

He says that each reef has passed through the successive stages of fringing reef and barrier reef. Now a fringing reef extends outwards from the shore, with no lagoon channel separating; and a barrier reef is a reef which may have a breadth of 10 miles, and a length of 90 or more miles, surrounding islands or bordering mainlands, from which they are separated by a navigable channel. Since reef building corals do not thrive at a greater depth than 100 feet or thereabouts, it is evident that the foundation of a coral reef could not have been laid in deeper water, and as such moderate depths occur only round islands, or off the shores of continents, the reef builders would begin their work by forming at first a fringing reef.

Slow subsidence of the sea bottom is supposed to have supervened, but while the foundations were being carried down, the corals continued to grow upwards, the rising

of the reef keeping pace with the sinking of the sea bottom; thus, in time, the fringing reef is converted into the barrier reef. This goes on until the reef-encircled island disappears below the waves, and a complete atoll will be the final result.

(To be continued.)

Reviews.

The price of books submitted for review should in every case be stated.

A Contribution to the Study of Blood and Blood-Pressure. By George Oliver, M.D., F.R.C.P. Lond., etc. Price 7s. 6d.

Possessing such a distinctly physiological title one would almost expect an exhaustive treatise on blood, its elements, and their properties, together with all the methods of determining blood-pressure, both intra-ventricular, and extraventricular. In the preface, however, the author states that the book contains an account of the major portion of his experimental work on the physiology of the red blood corpuscle, and arterial blood-pressure, together with clinical applications of the instruments used. He hopes that the little volume may be acceptable as a contribution to physiological medicine.

Considerably more than half the first chapter is devoted to a somewhat wearisome history of the manner in which the author applied the tintometer of the dye-manufacturers to the estimation of hæmoglobin. The instrument is the ordinary hæmoglobinometer in use in this hospital.

The remaining part of the chapter—some nine pages—is occupied with an account of the author's instrument for determining the number of red blood corpuscles—his hæmocytometer. In many excellent books it is clearly explained in a couple of pages.

Again, later on in the book, we are supplied with minute and laborious descriptions of two more of the author's inventions—his hæmodynamometer and his arteriometer. The former measures blood-pressure, the latter the calibre of an artery. Both seem to us to be open to objections too numerous to mention. It is, then, with these four instruments that the author has obtained results which form the basis of the whole book.

Chapter II. deals in a thorough manner with the variations in the amount of hæmoglobin and in the number of corpuscles in normal blood. It is altogether rather an interesting collection of results, and is well worth reading. In regard to the effect of altitude on the number of corpuscles, the author is inclined to think that the low relative humidity of the mountains causes a concentration of the blood plasma by loss of water through the skin and the respiratory tract. Hence, the increase in the number of corpuscles is only apparent. It is rather unfortunate that there are not among all the results published about visits to Arosa, Davos, Florence, etc., any concurrent observations on the specific gravity of the blood. From the results given it certainly seems that there is some connection between a low relative humidity and an increase in corpuscles. If the author's view is correct we should, of course, have an increase in the specific gravity of the blood. The statement that *the rise in corpuscles is accompanied by a similar, though reduced, increase in hæmoglobin* seems, however, to negative this view; for here we have a diminution in the worth of each corpuscle which cannot be accounted for by simple loss of water. Following on the clinical variations of the red corpuscle we have the treatment physiologically indicated for various forms of anæmia.

Chapter IV. yields the only piece of humour in the book. As a method of gauging the splanchnic area a weight of some twenty-eight pounds is placed on the abdomen, and the patient's blood-pressure, both arterial and venous, is taken before and after the event. Both this method, and that given for measuring the volume of a limb seem to be about the most crude that could possibly have been devised.

One result obtained by means of the hæmodynamometer, even the author admits, is heretical. This instrument shows that under the same hydrostatic conditions there is a mean arterial pressure, *i.e.*, the blood pressure in such arteries as the carotid, radial, brachial, femoral, etc., is the same. The whole fall in blood-pressure, the author concludes, is brought about by the arterioles. We should have much hesitation before accepting such a belief as this, and should require further proof than that afforded by the hæmodynamometer.

The physiological variations in the blood-pressure are classified under twelve heads:—(1) Gravitation, (2) Posture, (3) Muscular exercise, (4) Mental exercise and emotional excitement, (5) Fatigue, (6) Rest, (7) Excitation of respiration and effort, (8) Digestion, (9) Beverages, (10) Temperature, (11) Pulse rate, (12) Diurnal condition.

Each head is fully discussed. In the final chapter clinical variations caused by different kinds of baths and massage are given, and, from the results obtained, treatment for such conditions as anæmia, heart disease of peripheral origin, overloading of the splanchnic, etc., veins are suggested.

Taken as a whole, the book is far too lengthy for the matter. Repetition is apt to become wearisome. If the reader is not frightened by the padding, there are some interesting physiological results to be found, and the book is certainly a step in the right direction—the application of physiological results to clinical work.

NOTICE TO CORRESPONDENTS.

The Editor wishes it to be understood that no communications can be inserted which are not guaranteed by the name of the sender. All articles must be written on one side of the paper only.

From the Gazette's Special Pathologist.

NOTICES.

G. E. H., Ramsgate.—Reaction acid, sp. gr. 1027. albumen a small amount, sugar absent, blood large quantity. Microscopical examination of the centrifugalised deposit: Little could be seen but red blood corpuscles, calcic oxalate crystals, and squamous epithelium. There was no excess of leucocytes. A portion was then laked with ether, and another portion treated repeatedly with dilute acetic acid to dissolve the hæmoglobin. In the centrifugalised deposit from these a few hyaline casts were detected, some of these had blood discs adhering to them. The presence of hyaline casts with blood discs adhering appears to indicate the kidney as the source of the blood, while the absence of pus and renal pelvic epithelium, goes rather against the supposition that there might be a renal calculus. Is it possible that some cystic condition of the kidney might account for the persistent bleeding?

H., Ramsgate.—This portion of breast is diffusely infiltrated with scirrhus carcinoma, and there are many foci of inflammatory cells scattered through the growth.

C., Windlesham (marked S. M. M. C.).—The tubercle bacillus was not found in the sputum.

H. V. H., Wanstead.—Reaction faintly acid, sp.gr. 1013, albumen, a fair amount, sugar absent. Microscopical examination of the centrifugalised deposit: The field was so crowded with bacteria that the detection of casts and other elements was impossible. Can you let us have a fresh specimen for examination of deposit.

PATHOLOGIST.

Sport.

Cricket.

GUY'S v. LONDON COUNTY.

The season was commenced with this fixture on Saturday the 4th instant. Guy's winning the toss batted first and made 170 by fairly level scoring. London County replied with a score of 314 for 8 wickets, thus winning by 140 runs; this score might easily have been less if the fielding had been better and more energetic. The only feature of the Guy's team worth mentioning was the plucky bowling of Wetherell, who bowled well through almost the whole of our opponents' innings. Scores:—

Guy's.

E. A. Collins, c Crang, b Seymour	22
R. C. Poyser, b S. M. Tindall	16
H. Barber, b Seymour	32
H. M. Langdale, c Grace, b Madapa	10
F. Morres, st Kendle, b Madapa	32
H. M. Tollhurst, b Madapa	1
M. C. Wetherell, st Kendle, b Seymour	7
H. R. Grellet, b Seymour	2
E. Morgan, b Madapa	0
S. C. Bowle, c Westmacott, b Grace	14
C. M. L. Cowper, not out	20
Extras	14
Total	170

London County.

F. B. May, b Wetherell	21
C. E. C. Kendle, b Wetherell	104
B. Westmacott, b Morgan	13
C. B. Grace, st Collins, b Poyser	64
S. M. Tindall, b Poyser	21
Dr. Jackson Laing, b Wetherell	8
A. E. Crang, not out	49
H. E. Stapleton, lbw, b Wetherell	5
A. Madapa, c Grellet, b Wetherell	3
Seymour, not out	0
Extras	26
Total (8 wickets)	314

GUY'S 2nd XI. v. OLD CHARLTON 2nd XI.

This game, played at Charlton Park on Saturday, May 4th, resulted in an easy win for Guy's. Of the new men, Booklers and Norton showed good form with the bat, and Booklers and Chignell both bowled well. Scores:—

Old Charlton.

Brown, b Booklers	7
Gates, b Chignell	0
Perryman, b Chignell	0
Penstone, c Willan, b Booklers	7
Ryan, b Booklers	2
Taylor, b Booklers	0
Heaton, b Chignell	0
Dawes, b Booklers	0
Hills, c Palmer, b Chignell	10
Bradley, not out	21
Wingfield, c Lawry, b Chignell	4
Extras	5
Total	56

Guy's.

J. S. Booklers, b Ryan	26
R. Willan, b Heaton	0
A. H. Turner, c Penstone, b Wingfield	22
T. A. Chignell, b Wingfield	30
E. L. Norton, b Penstone	29
H. T. Palmer, b Dawes	24
J. Donnell, c Bradley, b Penstone	5
R. C. Lawry, lbw, b Ryan	6
J. Goss, b Ryan	14
F. C. Robinson, c Taylor, b Heaton	0
Substitute, not out	4
Extras	19
Total	179

Guy's Hospital Swimming Club.

The Guy's Hospital Swimming Club is incorporated in the Clubs' Union, and any member of the latter is a member of the former without further subscription. Men wishing to become members of the Swimming Club, who are not members of the Clubs' Union, must pay an annual subscription of 10s. 6d. The swimming season commences with the summer term and ends with it, lasting only three months. During the season two polo matches are played every week.

For the benefit of new men we may mention that the headquarters of the club are the Southwark Baths, about five minutes walk from the hospital; members are admitted at a reduced rate of fourpence instead of sixpence on showing their club cards. The club card can be obtained from any member of the committee for fourpence, it contains the fixture list of the Water Polo team, and a list of officers.

Hitherto swimming at the hospital has only taken the form of water polo, but this year it is proposed that a regular swimming team be started, and team racing practiced, so that we can make a respectable show against the other hospitals, and bring the cup to our smoking room. To do this we must find some more fast swimmers, and we hope that any new men who are keen on swimming in these races, or playing polo, will make themselves known to the secretary, Mr. R. B. Dawson, or any member of the swimming committee, as it will be very difficult to find them otherwise.

The club days are every Thursday during the summer term at 3.45 at the Southwark Baths, and on these days all members should go down to get polo practice; the ball may be obtained from the attendant on other days if a sufficient number of men turn out for a scratch game.

Guy's Hospital Lawn Tennis Club.

The Lawn Tennis Club commenced their season on Saturday, May 4th, with a trial match. Appended is the list of matches which have been arranged.

First VI.

Date.		Against.	Ground.
May,	S 4	Trial Match...	Home.
	S 11	S. Croydon	S. Croydon.
	S 18	Blackheath "A"	Blackheath.
	S 25	Harold	Home.
	W 29		
June,	S 1	Wanstead	Wanstead.
	S 8	Kent	Home.
	W 12		
	S 15	E. Croydon	Home.
	W 19	Wanstead	Home.
	S 22	Past v. Present	Home.
	W 26		
	S 29	Redhill "A"...	Redhill.
July,	W 3	Staff	Home.
	S 6		
	S 13	Harold	Gipsy Hill.
	S 20	Basingstoke...	Home.
	S 27	E. Croydon	Croydon.

Second VI.

May,	S 4	Trial Match...	Home.
	S 11	Addiscombe...	Home.
	S 18	Surbiton	Home.
	S 25		
	W 29	Bromley	Home.
June,	S 1	St. George's...	Away.
	S 8		
	W 12	Bromley	Away.
	S 15	St. Thomas's	Away.
	W 19		
	S 22	Addiscombe...	Away.
	W 26	Clarence	Home.
	S 29	St. George's...	Home.
July,	W 3	Clarence	Away.
	S 6	St. Thomas's	Home.
	S 13	London Hospital	Home.

Inter-Hospital Cup Ties to be arranged later.

Marriages.

COOPER—DAY.—On April 17th, at St. Stephen's, Gloucester Road, by the Rev. F. W. Worsley, M.A., Charles Edward Cooper, B.A., M.B. Cantab., of Ivybridge, S. Devon, younger son of the late Joseph Cooper, of Calyford, Devon, to Fanny Elizabeth, third daughter of R. Newcombe Day, of Harlow, Essex.

TULK-HART—BIGLAND.—On April 29th, at Staveley, Ulverston, by the Rev. Edwin Heath, assisted by the Rev. Vincent Kirby, Thomas John Augustus Tulk-Hart, M.B., son of E. J. Tulk-Hart, M.D., of Brighton, to Blanche Madeline Bigland, daughter of Thomas Bigland, Esq., M.R.C.S., granddaughter of the late John Bigland, Esq., of Bigland Hall, Ulverston.

Deaths.

COLLET.—On April 28th, during the defence of the Magistracy, Mahlabatini, Zululand, Charles Henry Traill Collet, age 27, sergeant, Natal Mounted Police, second son of A. H. Collet, Ashurst Lodge, Worthing, and grandson of the late H. T. Collet, M.D., both of Guy's Hospital.

O'MEARA.—By cable from Aden: On 26th April, Gertrude Charlotte, beloved wife of Captain Eugene J. O'Meara, I.M.S., 11th Bengal Lancers, and second surviving daughter of the late Olive Hollingworth, Esq., and Mrs. Hollingworth, of Midlands, Westend, Southampton. Indian papers please copy.

TAYLOR.—On April 27th, at Burslem, Staffordshire, James Mare Taylor, L.R.C.P. Lond., M.R.C.S., D.P.H., aged 57.

Ed.—F. G. G.

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Calendar of Coming Events.

May, 1901.

Sat. 25.—Messrs. Jacobson and Fripp's take-in; Drs., W. C. Lewis and F. L. Thomas; Cl., S. J. Ormond.
G.H.C.C., I. v. Beckenham, home.
G.H.L.T.C., I. v. Harold, home.

Mon. 27.—Whit Monday, Medical School Office closed.
G.H.C.C., I. v. Eltham, away.

Wed. 29.—1.30 p.m., Clinical lecture by Dr. Hale White.
G.H.C.C., I. v. London County C.C., away.
II. v. London Hospital, away.

Thur. 30.—Messrs. Howse and Symonds's take-in; Drs., B. Soper and F. J. Turner; Cl., J. F. Robinson.
G.H.C.U., Address by Rev. G. R. Thornton.

Fri. 31.—1.15 p.m., Clinical lecture by Mr. Lane.
Last day for names to be sent in for 1st and 2nd M.B. Camb. Exams.
9 a.m., Special Exam. for Dental Operative Prize.

June.

Sat. 1.—Messrs. Lucas and Lane's take-in; Drs., G. E. Malcolmson and G. T. Wrench.
G.H.C.C., I. v. Reigate Priory, away.
II. v. St. Thomas's, home.
G.H.L.T.C., I. v. Wanstead, away.
II. v. St. George's, away.
July Appointment List opened.

Mon. 3.—Last day for sending in Fees and Certificates of 1st and 2nd M.B. Camb. Exam.
1.15 p.m., Clinical lecture by Dr. Horrocks.

Tues. 4.—12 noon, Mr. Rowell's Demonstration on Anæsthetics.
Exam. for Treasurer's Gold Medal begins.

Wed. 5.—1.30 p.m., Clinical lecture by Dr. Hale White.

Thur. 6.—Messrs. Golding-Bird and Dunn's take-in; Drs., T. M. Smith and L. G. Nash.
G.H.C.U., Address by A. C. Tessier, Esq.
Application to Medical School Office for Schedules for Final Conjoint Exam. to be made not later than this date.

Fri. 7.—1.15 p.m., Clinical lecture by Mr. Lane.

Sat. 8.—July Appointment List closed.
G.H.C.C., I. v. Brentwood, home.
G.H.L.T.C., I. v. Kent, home.

Guy's Hospital Gazette.

MAY 25, 1901.

Two Lectures on Congenital Heart Disease.

CLINICAL LECTURE BY DR. TAYLOR,
March 9th, 1901.

I.—PATENT DUCTUS ARTERIOSUS.

(continued.)

GENTLEMEN,—You will remember that at the last lecture I was dealing with some cases of congenital heart disease, and the case that I spoke about then was one in which we had reason to infer that the patient was suffering from a patent ductus arteriosus. I was then comparing that condition with another kind of communication between the aorta and the pulmonary artery, which is brought about by the rupture of an aneurysm of the former into the latter vessel.

You will remember, perhaps, that I said that a patent ductus arteriosus was accompanied on some few occasions by a curious, wavy, long-continued diastolic murmur. Then I told you that out of nineteen cases of communication between the aorta and the pulmonary artery that I had collected, there was an almost equal division between cases in which there was a systolic murmur, cases in which there was a double murmur, and cases in which there was a continuous murmur. The figures were seven, six and six. I think one must admit that if one thinks of this communication between an

aneurysm and the pulmonary artery as having points of resemblance to a communication between the ductus arteriosus and the pulmonary artery, one must also admit that the conditions are somewhat different, and that these differences may affect the physical signs.

For instance, aneurysms do not arise except under special circumstances, that is, in advancing years and when degenerative changes are taking place in the system. Coexistent with this degenerative condition of the arterial wall, you are apt to get degenerative conditions of the arterial valves, so that it is quite likely, though not necessary, that the aneurysmal disease may be complicated with valvular disease. The disease of the valves may give rise to murmur; and the aneurysm itself may be accompanied by a murmur produced within its own cavity.

Then there is another condition. It is almost a matter of necessity that an aneurysm of the aorta, before it ruptures into the pulmonary artery, shall press upon it, and by doing so it will narrow the pulmonary artery and probably give rise to a pressure-murmur at that spot. If you read some of these cases of communication between an aortic aneurysm and the pulmonary artery, you will find that there is some difficulty in exactly estimating at what period in the case the rupture takes place. Sometimes, no doubt, a sudden aggravation of the symptoms has taken place at the time of the rupture; but in other cases the lesions preceding the rupture have been so serious that the new conditions set up by the rupture have added but little to the dangers of the case, or to the symptoms which would indicate them.

There was, a few years ago, in the *British Medical Journal*, an analysis by Dr. Lamplough, of some of these cases of communication between the aorta and the pulmonary artery, and he arrived at the conclusion that there was generally a continuous murmur; and he regards a continuous murmur as almost pathognomonic of communication between the pulmonary artery, the aorta and other vessels or cavities, such as the superior vena cava and the right auricle. He says also that there is very generally a thrill. If we admit that when such a murmur is present it is pathognomonic of such a communication, it must be also allowed, as is shown by my cases, that the lesion may exist without the murmur, and Dr. Lamplough suggests the following explanations of its absence. First, that there may be some disease of the aorta which interferes with the elasticity of its walls, and thus spoils the diastolic part of the murmur, it being thereby implied that the diastolic half of the murmur is due to the recoil of the arterial walls driving the blood through the communication in the pulmonary artery. Secondly that there may be a great deal of coagulum in the arterial sac. And thirdly, that in cases where there is regurgitation in combination with aneurysm and disease, it may be sufficient to reduce the blood-pressure to such a degree that a murmur is not produced.

There is another point of some interest that we were discussing in the case of patent ductus arteriosus, and that is the question of hypertrophy and dilatation of the heart. The patient whom we have in Clinical with, apparently, a patent ductus arteriosus has the forcible impulse of the heart which implies a certain degree of hypertrophy. The explanation of the hypertrophy and the dilatation is not, perhaps, ready to hand. One naturally regards hypertrophy and dilatation of the heart-muscle as a result of increased pressure in the ventricular cavities.

The question is to what extent an increase of pressure is produced by this communication between the two vessels which we believe we recognise? It is not at first very obvious why there should be an increase of pressure. What are the conditions which regulate the pressure that allows the ductus arteriosus to close in the comparatively healthy individual? And what was the condition which brought about in this patient an increase of pressure on one side, of such a kind as to maintain that communication in a patent condition? We have not at present any information as to the exact cause of the patency of the ductus arteriosus. Until that is supplied to us perhaps it would be unwise to speculate too freely upon the reason that the patient has a hypertrophied heart. So far as the obstruction is concerned, one would think that, if there was a communication between the two vessels, there would be a relief of pressure on

the two ventricles, which would be a safeguard to the patient. If one regards the left ventricle as being the ventricle which is pumping the blood into the aorta, one would think that the escape of blood into the pulmonary artery might be the reason why the left ventricle should be spared. If we take that view we must allow that the right ventricle may, on the other hand, be oppressed, and, therefore, hypertrophy and dilatation might start with the right ventricle. All we can say, I suppose, is this—that if there be any obstruction whatever to the even working of the heart, in time that will tell on some portion of the organ,the muscle will become overstrained and hypertrophy and dilatation must result.

That the lesion in this case is not nearly so serious as are many congenital heart lesions is obvious. At any rate, here is a woman, twenty-five years of age, and she has not suffered from any excessive cyanosis. Though there is a certain amount of ruddy colour visible in her lips and cheeks, there is not apparently any severe obstruction to aeration of the blood. Other cases on record have been in patients thirty-five to forty years of age, and therefore they can attain almost middle life with this communication in existence. On the other hand, the fact that she is under our observation, and that the myocardium is involved, renders a long life improbable.

II.—PERFORATE SEPTUM VENTRICULORUM.

I pass now from this subject to another form of communication that takes place as a congenital lesion, and that is, a perforation of the septum ventriculorum, a communication between the right and left ventricle. This communication varies much in size. You will, no doubt, remember that early in fœtal life the heart consists of three cavities—two auricles and one ventricle—and that subsequently the ventricular septum rises up in the middle and separates the right from the left ventricle. That ventricular septum is frequently defective, no doubt, from various causes. At a point in the normal septum between the anterior and the right posterior aortic valve, you will find that there is a transparent area, which is known as the "undefended space," and which has a special relation to the subject that I am dealing with. The muscular substance of the septum extends up to the level of the lowest part of the sigmoid valves, and there ceases, so as to leave the septum simply fibrous. Now it is just at this spot that you get the failure of the septum ventriculorum to close. In the fibrous tissue, or instead of the fibrous tissue, there is an aperture; the septum starting at the apex does not completely reach the base. Sometimes the communication is a very small one: but on the other hand, you may have a very large opening between the two cavities. Under these circumstances you find that the aorta seems to arise from both the right and left ventricle, and I will explain how that comes about. The greater number of these cases in which the septum is defective are the result of an obstruction to the pulmonary artery, which arises in intra-uterine life. The pressure in the right ventricle increases, and the blood naturally tends to be turned over into the left ventricle in order to get away from the heart by the aorta. The free communication between the right ventricle and the aorta tends both to prevent the growth of the septum and to divert it to the left, so as to bring the base of the aorta over the right ventricle.

An instance of defective septum was discovered only last week at the post-mortem examination of a child dying in the Clinical ward. A child of four months came in with diphtheria. Tracheotomy was performed, the usual antitoxic serum was injected, but in spite of that the child died. I do not gather from the report what were the conditions of the heart during life, whether there was a murmur resulting from the passage of blood through the septum or not. No doubt, the serious illness of the child prevented an accurate investigation of the heart; but it is quite conceivable that there was no murmur. The report contains an illustration of the lesion made, I presume, by Mr. Curtis, who reported the case. It shows, as seen from the right ventricle, an opening in the septum ventriculorum leading into the left ventricle. Above it are the valves of the aorta

somewhat deformed, the three valves being unequal in size. It is further stated that there was no pulmonary artery at all, and that the aorta came off from both of these ventricles.

You will naturally ask, "If there was no pulmonary artery, how were the lungs supplied?" By the bronchial arteries. Here was a child who lived up to the age of four months, and it was stated, before the child was dead and before the heart was seen, that it was a healthy baby. At any rate, it appears not to have suffered from the manifest indications of congenital heart disease. One cannot help suggesting that if the child had not died of diphtheria, and had lived a few months or a year or two longer, some indications of difficulty would have arisen; for it seems unlikely that the lungs could be adequately supplied by the bronchial arteries for the purposes of respiration, and if that were the only means for the lungs to have aeration, a crisis must have arrived some time or other. In some such cases the ductus arteriosus has been patent, and the blood has got to the lungs by that passage from the aorta.

Cyanosis and its cause.—Now, I have already said that the chief cause of the failure of the septum ventriculorum to close is obstruction of the pulmonary artery, and these are the lesions which are commonly present in cases known as *cyanosis* or *morbus cæruleus*.

Under the name of congenital disease of the heart, it is usual to picture to oneself a child with a dusky or even blue or purple aspect, lips dark red, nose and ears congested, fingers and hands and toes dark, livid, purple, and the fingers and toes clubbed, that is with the last phalanges thickened. The patient is short of breath and unable to join in any of the sports of youth, and is generally a rather miserable creature.

Of course the extent of that discomfort is proportionate to the extent of the lesion. In those cases in which the lesion is not very severe, in which the obstruction to the pulmonary artery is not very great, these patients may live comparatively comfortably for fifteen to forty years, but the majority of such cases die much sooner, some of them at three, or four, or five years of age, or in later childhood.

The clinical examinations of such cases shows generally some hypertrophy of the heart, and a murmur at the pulmonary area traceable to the left clavicle; perhaps heard over a much wider area, and perhaps accompanied with a thrill. In these cases there is almost certainly an obstruction of the pulmonary artery, and there is in all probability this communication between the two ventricles, for the reason that I have stated, namely, that if the blood in early life cannot get through the pulmonary artery, and if the ductus arteriosus is not patent, it must pass over into the left ventricle and be driven out of the heart through the aorta. The murmur is, then, a physical sign of pulmonary obstruction, and not of a defective septum ventriculorum. How far in some cases a small communication between the ventricles may contribute to this physical sign I do not know.

There is another point about these cases that you must remember, namely, that the cyanosis which leads to the disease being spoken of as blue disease, or morbus cæruleus, is almost certainly not due solely to the mixture of the venous with the arterial blood. The cyanosis is mainly due to the fact that the blood does not get into the lungs in sufficient amount, and therefore is not properly aerated, and consequently an imperfectly aerated blood is circulating throughout the body.

This is especially well illustrated by the fact that the appearance of congenital heart disease may be very closely simulated by bronchiectasis. In this disease the patient has dilated bronchial tubes, a good deal of fibroid change in the lung tissue, and the aeration of the blood is very imperfect. If that condition arises, as it often does in somewhat early life, the patient goes on with defective aeration for years, the amount of blood that goes through his lungs is less than it ought to be, and the strain upon the right ventricle is considerable; it dilates and hypertrophies, and the patient is apt to get an amount of cyanosis, with clubbing of the fingers and shortness of breath, which is very like that of congenital heart disease. There is here no question of mixture of blood; but only of defective aeration.

I may incidentally mention that cases of congenital heart disease occur with cyanosis and clubbing of the fingers, in which no pulmonary murmur, and even no murmur at all can be heard. The malformation is no doubt different from those we are discussing, and perhaps not the same in all cases.

Perforate septum as the only lesion.—I will now speak of a group of cases in which a perforation of the septum is the only defect, in that the septum has just failed to complete its growth at the upper part, and so has left an aperture at the "undefended space." There is no obstruction to the pulmonary artery, and therefore it is not the passage of blood from the right to the left ventricle which is producing the aperture in the upper part of the septum. If there is nothing more than the abnormal aperture then the blood must pass from the left into the right ventricle, because the pressure is stronger in the left ventricle. If the pressure in the two ventricles were the same, there would be no constant current from the one to the other. But there is evidence of such a current in many cases because there may be a murmur which is heard at the left side of the sternum, and is traceable across the sternum to the right side, corresponding to what you would expect supposing such a communication existed and allowed a current from the left to the right ventricle. At the same time there may be a thrill, which is systolic, and corresponds to the time of vibration of the murmur.

I had a case of the kind, or which I inferred to be, in Mary ward some eighteen months ago. The patient, aged thirty-one, had no cyanosis and no clubbed fingers, but she had a systolic murmur extensively heard over the front of the chest, and loudest over the third, fourth and fifth costal cartilages on the left side. A systolic thrill could be felt over the left fourth costal cartilage. At the Evelina Hospital some years ago, a girl, about eight or ten years of age, was suffering from mitral stenosis, and on her death the mitral stenosis was found to be accompanied by a perforation of the septum. During life we heard a presystolic murmur and thrill over the apex, and also a systolic murmur accompanied by a slight thrill over the middle of the sternum. The physical signs were thus explained by the conditions which we found post-mortem.

But you must not imagine that every time you have a systolic murmur over the sternum accompanied with a thrill that you have an aperture in the septum ventriculorum. For cases occur in which the murmur of mitral stenosis is accompanied with a thrill and a systolic murmur over the lower part of the sternum, and in which the patient may prove to have simply tricuspid regurgitation in association with mitral stenosis.

I suppose that in cases of perforation of this character the patients are not generally great sufferers. They must be somewhat in the same position as patients with a patent ductus arteriosus. If there is no obstruction to the pulmonary artery, their tendency to cyanosis must be slight, if it exists at all, and they will probably, in the course of time, suffer from similar cardiac trouble, which must arise owing to a defect in the regular working of that organ.

Thrills.—The consideration of these cases leads me to make a few remarks on the subject of thrills in the diagnosis of heart disease. At different times a good deal of importance has been attached to them, and at one time it was a common saying that a thrill in a case of heart disease meant that there was mitral stenosis. I think we may admit that a thrill is more common with mitral stenosis than with any other lesion. But you have already heard me talk of thrills, in this lecture and the last lecture, as occurring in connection with a patent ductus arteriosus, with pulmonary stenosis, with perforation of the septum ventriculorum, and with tricuspid regurgitation. So that there are four other conditions, apart from mitral stenosis, in which thrills may be felt. A thrill is nothing more, surely, than the palpability of vibrations which are otherwise audible. Vibrations cause sound, and some vibrations that are causing sound can also be felt.

There is nothing surprising in the fact that a vibration causing a murmur should be felt. We consider it is a part of normal physiology that we should feel over the whole of the chest the vibrations which cause the sound of the

voice. You expect to get tactile vocal fremitus, and why should you not sometimes get a tactile cardiac fremitus from the vibration of the blood-current? I think the real question to be asked is, Why do we not get a thrill with every murmur that is heard? As a fact, there is scarcely a murmur that may not be accompanied with a thrill. I have felt at different times a thrill in aortic stenosis and aortic regurgitation, in mitral stenosis and mitral regurgitation, in tricuspid stenosis and tricuspid regurgitation, in pulmonary stenosis, in aortic aneurysm, in patent ductus arteriosus, in patent septum ventriculorum; and I have no doubt that somebody else has felt thrills in the other classes of case which remain. So that there is scarcely a sound in cardiac pathology which may not be sometimes accompanied by a thrill. The distinctiveness of a thrill, therefore, for diagnostic purposes becomes of somewhat little value.

I do not know that I have ever seen a satisfactory statement of the conditions of thrills, I mean, why exactly thrills are more frequent in one condition than in another. I suppose a thrill must require a certain force of contraction in the production of the wave, and a certain force of vibration or amplification of vibrations, that is, loudness of sound as such. The vibrations must not be too frequent in order that they may be appreciated by the touch, that is they must be of comparatively low pitch. If they are produced near the surface and are easily conducted to the surface, they are more likely to be appreciated than if they occur in deeper parts. Those must be requisite conditions, and beyond that I am not able to go. I think we can, at least, say that if those are the conditions, it is not surprising if we get a thrill in mitral stenosis, because the vibrations are produced in the left ventricle and are readily conveyed to the surface where the left ventricle touches the chest. Similarly, we can understand getting a thrill in cases of perforation of the septum ventriculorum when the blood is being driven from the left ventricle to the right ventricle, which lies largely in front of it. The current of blood passing in this direction would produce a vibration in the right ventricle close to the surface. Similarly, we can appreciate the production of a thrill in aortic stenosis, or pulmonary stenosis, because the two vessels are not very far from the surface of the chest. Conversely we can see that a thrill in mitral regurgitation is not so likely to be felt, because the vibration must take place in the left auricle which is far back in connection with the spine, and not in front of the chest near the sternum.

Treatment.—As to the treatment of these conditions of congenital malformation, you will see that it is mainly symptomatic. You cannot cure these lesions, you cannot patch up a patient's septum ventriculorum, or ligature a patent ductus arteriosus. One has got to leave the lesions as they are in ordinary heart disease, and one can do little more than help the heart in its struggles by giving rest, and using laxatives to keep the excretions free, and giving light diet, and using such drugs as digitalis and strychnine, given in ordinary heart disease, with the judgment that may be necessary.

In the Out-Patient Department.

CASES UNDER MR. SYMONDS.

CASE I.—The patient was a woman, aged twenty-nine, who had had an attack of acute rheumatism (?) ten years ago. She now had effusion into both wrist-joints, and into some of the inter-phalangeal joints, as well as some of the metacarpo-phalangeal joints. The three outer fingers of the left hand were flexed to a right angle at the first inter-phalangeal joint. There was complete fixation of these joints. There was some flexion and fixation in other inter-phalangeal joints. There was considerable wasting of the dorsal inter-ossei muscles in both hands. The joints were not markedly painful or tender. A diagnosis of chronic rheumatic arthritis was made, stress being laid on the multiplicity of joints affected, and the deformity produced by the disease. The origin of the disease may be of a septic nature, or the disease may be due to lesions in the nerve system. In this case it was pointed out that the wasting of the inter-ossei muscles was out of all proportion to the deficient movement in the finger joints. This fact points to a nervous origin of the disease. The disease is not amenable to surgical treatment, so blisters to be applied to the affected joints, and tonics were advised as the form of treatment for this form of arthritis. That the onset of the disease may start in an attack of rheumatic fever, acute or subacute, is borne out

by this case, and likewise by one under Dr. Sansom's care, the history of which is reported on page 1083 of the *British Medical Journal*, for the 4th May, 1901.

Case II.—This was a middle-aged woman, who complained of much pain, especially at night, in both elbows and in the right knee during the past month. On examination, a large patch of lupus was found on the anterior and outer aspect of the upper part of the left forearm. A hard swelling could also be felt localised to the upper third of the left ulna. The lower part of the right humerus was enlarged, while another swelling could also be felt in the region of the internal condyle of the right femur. All these tumours, which were smooth in outline, were somewhat tender. There was limitation of flexion and extension in both elbow-joints; but there was little, if any, limitation of movement in the upper radio-ulnar joint on either side. Limitation of movement appeared to be due to pain rather than actual interference with the mechanism of the joint. The following diagnoses were discussed:—

1. Swellings due to inflammation.
2. Tumours due to new growth.

The hardness, tenderness, and large size pointed to inflammation. The cause of the inflammation may be due to

1. Tubercle.
2. Syphilis.

The presence of a patch of lupus was in favour of tubercle; but, on the other hand, the age of the patient, the fact that the swellings were multiple, and occurred in connection with the shafts of the long bones, and not in connection with their extremities, were considered as points absolutely excluding tubercular disease. The multiplicity of the swellings is certainly in favour of syphilitic disease, but no collateral evidence of syphilis could be made out.

Syphilitic periostitis was diagnosed; this leads to the formation of nodes, which occur chiefly on the tibiæ and cranial bones. They may also occur on the bones of the forearm, and then indicate congenital rather than acquired syphilis. (Hutchinson). The continued presence of the nodes, even after treatment, is dependent upon the fact that adult bone has been formed by the inflammatory process and cannot be absorbed. These nodes, if the formation of adult bone has not taken place, may disappear. On the other hand, they may break down, forming fluid nodes. The fluid in these nodes may be either serous or purulent. If there is no clear indication that the fluid is purulent, no attempt to get rid of the fluid by an operation should be made. The skin over such nodes is thin, and sloughing is very prone to occur at the edges of any incision made through the skin which lies over a node. If a node does lead to suppuration, necrosis is liable to occur, with the formation of an ivory-like sequestrum, which is very hard and dense. The sequestra left after an acute inflammation are macerated, whilst those which are left after tubercular disease are cancellous. If the tumours are due to new growth they are secondary to

1. Melanotic sarcoma.
2. Carcinoma of
    1. The breast.
    2. The rectum.
    3. The large intestines.
    4. The bile ducts.

In Quest of Gold.

(From our Special Correspondent in West Africa.)

Subrie,

April 7th, 1901.

It is suprising how soon the feeling of strangeness wears off, and how soon it is succeeded by the condition of mind in which everything is accepted as it comes, as a matter of course and without comment. I have arrived at that psychological stage already, and I find it hard to sift out from the chaff of everyday sameness some grain that may be a germ begetting interest in your cooler brain. Every morning I awake with a perfect realization of my surroundings, as they are in their native barrenness without the veil of glamour which wonder casts around. I appreciate the absurd insufficiency of the native thatch as a rain guard, the native food as a supporter of endurable life, and the native himself as an animal. The latter condition is continually being borne in upon us in our dealings, shortened to the utmost, with our neighbours. For instance, up in this country there are a good number of sheep, the property of individual villagers, and these sheep, despite their miserable condition, are nevertheless a welcome addition to our "tinned" menu. Prices hold here pretty much as at the coast, eggs being sixteen a shilling, fowls 1s. 3d. each, and sheep 10s. to 15s. according to the size of the beast. I wanted a sheep, as my store of food was low, and gave my boy some money and instructions to bring one in. Yet, the pig-headed natives, not eight miles from this village of ours, not only refused to sell, but were prepared to resist with violence the attempts of my boy to effect a forced sale. This action may perhaps find favour in your eyes as an instance of laudable independence—you being in the receipt of comfortable and regular meals—but you must agree that the sequel is relieved of any redeeming feature. The next day I walked over to that village, armed, of course, and sent for the chief. After a severe reprimand and a promise of punishment swift and sudden, I repeated my offer for a sheep. Not only was the animal at once produced, but out of affection for me the chief refused to take any money. His affection was fear, pure and simple, and he thought he had better climb down. But if he had had the least powers of reasoning he must have seen that it would have been better to have sold in the first instance than to have created trouble which had to be set right by a gift. I should add that my boy required three fowls before his ruffled feelings were calmed.

This is a typical example of native dealing. Without the brains to become thorough-paced scoundrels they do their best to annoy us and each other, mostly in a petty fashion, but occasionally with the addition of a nasty little murder. Do not picture to yourself an arcadian people with a scorn for worldly vanities and a love for agriculture and husbandry; money, good silver money, they desire, for it spells gin and gay cloths. Work in fields or on roads they know not, and knowing not have no fear. Living on a mess of boiled pounded plantain, "fou-fou," loafing half the day and sleeping the remainder, gambling when he has anything to lose, drinking when he can obtain an intoxicant, the West African slips through life, a useless excrescence on the earth's fair face.

One is tempted to enquire how far the Mosaic law is applicable in this country. If anywhere, then, here does killing become no murder. It is impossible to look upon the aborigine as anything more than a superior kind of monkey, with a monkey's intelligence, a monkey's faith, and a monkey's gratitude. Some few years back a quarrel broke out on an American kerosine brig off Cape Coast. After some slight "bickerings," as Sir Nigel Loring puts it, a Russian Finn slew a Polish Jew. For this offence he was fined £20, and with this as a precedent, an ingenious coaster set to work to solve the following problem: "If it costs a Russian Finn £20 to kill a Polish Jew, how much will it cost an Englishman to kill a Fanti?" The exact details of the problem, or rather the solution, are not available, but the answer, avoiding decimals, was as nearly as possible 2¾d. a dozen.

I discovered the other day that we had been harbouring a fetish priest in the person of a hammock man. Most of our labourers, when questioned, profess Roman Catholicism, while a few are followers of Wesley. As, however, they all consider religion to be a very difficult object for transport there is little to distinguish one sect from another in the bush. The only item of religion that they obey, even in the bush, is the law forbidding the doing of work on Sunday. It came rather as a surprise, I must confess, when I found that we had at least half a dozen followers of the old fetish religion, headed by a fetish-man. All the villagers up here have their fetish-groves, their fetish-pots and a fetish-man, but I thought all the coast men would have dropped these ideas from intercourse with whites.

It was on a Sunday afternoon, at a little place called Sarahu, that I made the acquaintance of the priest. I had previously reprimanded him in his personality as a labourer for laziness, and had fined him several days' pay, so that I had no reason to suppose that he loved me. I also knew that he feared me, and avoided looking me in the face. I do not blame him for that. This particular afternoon there was much beating of tom-toms, tin cans and other "instruments of musick," while a monotonous chanting made sleep impossible. It is curious that the beating of drums is not nearly so annoying as the vocal effects that are added by the performers. I rned out to see what the row was, and found my friend dancing before a delighted throng, with his eyes closed and his chest heaving rapidly. Occasionally he would make short rushes, scattering the native crowd before him. I noticed, however, that he never rushed in my direction, although I put myself directly in his way. After this business had been going on for some time, he rushed into a house and commenced making guttural noises in his throat, each noise, I was told, representing a devil which he had successfully coughed off his chest. I took the opportunity of his sitting down to have a look at his eyes. He resisted strongly, but I got the lids open. The eyes were, as I expected, quite normal, both as regards the size of the pupil and the reaction to light. My interference seemed to light up the devils in him once more, and he rushed madly out into the open and recommenced his dance. I was still not quite satisfied whether he was in an hysterical condition of religious enthusiasm or merely shamming, so I went into my hut and pulled the bullet out of a revolver cartridge, replacing it with a nice wad of paper. Then, going out into the open again I walked up to him and yelled to him to clear off. As he took not the slightest notice, I pulled out the revolver and fired at him point-blank. Even that only caused him to open his eyes for a moment as the wad caught his chest, so I think he must have been in an autohypnotic condition. The villagers and his friends thought, I had killed him, but were reassured on seeing the bullet and on my telling them the charge was blank. Some little time later we sent word that he had better make an end of his devils at once, otherwise we should be under the painful necessity of exorcising them with a belt through the medium of his person. Then the performance slowed up, and with the stopping of the drums he gradually assumed a more reasonable frame of mind. That night, after chop, I had him in and questioned him about the afternoon's performance. He professed to know nothing. He said that a "bussum," or devil, had entered into him, and after that he was unaccountable for his actions. I tried him with questions in the hope that I might get some sort of history of epilepsy, but without result. The effect of the drums on his highly neurotic person was to bring on the condition in which I had seen him. Next day he reported sick and the day after was sacked, so I have been unable to pursue my experiments further.

The rainy season is now settling down in earnest, and does not tend to add to our happiness. The temperature is not materially lower, although a night after heavy rain is usually more endurable than the average. The disadvantages of tropical rain, when a primitive thatch alone stands between you and the heavens, are too obvious to need enumeration. Add to these trifling inconveniences a great influx of noxious vermin—centipedes eight inches long, flies with a great taste for blood and ample means of getting it, beetles, moths, ants of all shapes, sizes and colours, and double-ended scorpions—and life becomes almost exciting. Compared with our African forms of insect life even the fauna that I studied when externing seems preferable. *A propos* of

scorpions, I unearthered a beast about twelve inches long the day before yesterday from an old packing-case. Unfortunately, I finished him with a shovel in my first outburst of disgust. I wish now that I had pickled him, for he was a big beast even for this country. We have not been troubled with snakes as yet. Possibly that is a joy to come. Leopards are sometimes seen and killed, but I have not had the luck to come across one yet. And, despite what the books say to the contrary, elephants' spoor has been seen only three days' march from here. A day's march north-west and another north-east brings you to Ynahin, where an engineer was tortured and murdered in the late rising. The village chief is supposed to have been executed at Kumasi after we had relieved that place. But our government has not yet obliterated the village. We have pleasant neighbours.

Pass List.

Final Conjoint Examination, April, 1901.

MEDICINE, SURGERY AND MIDWIFERY. — *D. G. Greenfield.

MEDICINE AND SURGERY.—*L. Hirsch, *T. A. Matthews.

MEDICINE AND MIDWIFERY.—R. S. Roper, A. R. Thompson, *G. T. Willan.

SURGERY AND MIDWIFERY.—J. A. Andrews, *G. S. Graham-Smith, W. M. Robson.

MEDICINE ONLY.—*J. Atkins, *E. C. Bevers, *T. H. Body, *G. G. Davidson, J. Alison Glover, *E. F. G. T. Heap, *E. T. Jensen, T. T. Kelly, *D. L. Morgan, E. Stott, *N. F. Ticehurst, *E. G. Wales, *F. D. Welch.

SURGERY ONLY.—W. H. Brailey, *A. E. Cawston, A. D. E. Kennard, H. K. Lacey, *P. S. Mandy, G. H. H. Manfield, *S. J. Ormond, H. G. Rashleigh, *E. Shelton-Jones, A. W. Soper, *P. H. Ward, M. D. Wood.

MIDWIFERY ONLY.—A. C. Ambrose, J. Evans, A. W. Gater, W. P. Ker, W. H. Loosely, *K. V. Trubshaw, H. Wacher, A. Wylie.

* Denotes completion of the Final Conjoint Exam.

Royal College of Surgeons of England, May, 1901.

FINAL FELLOWSHIP EXAMINATION.—C. Banting, F. S. Batchelor, R. P. Rowlands, G. S. Simpson, P. N. Vellacott.

PRIMARY FELLOWSHIP EXAMINATION (Unofficial List).—K. Black, G. Carlisle, P. P. Cole, E. H. B. Milsom, C. D. Pye-Smith, N. Ivens Spriggs, R. H. J. Swan, P. Turner, A. M. Webber.

(Old Regulations.)

L.D.S. EXAMINATION.—G. W. Badcock, A. H. Clogg, H. J. Corin, E. L. Davis, J. H. Hinton, R. D. Knight, W. E. Lowe, G. H. Morris, A. W. Penrose, T. Robinson, G. F. Sargood, N. P. Shepherd, E. Gethen Smith, A. H. Staple, G. H. Steweni, V. E. Turner.

(New Regulations.)

SECOND PROFESSIONAL EXAMINATION.—E. J. Gaffney.

FIRST PROFESSIONAL EXAMINATION. — MECHANICAL DENTISTRY AND DENTAL METALLURGY.—H. P. Aubrey, J. B. Ball, †F. Barkshire, T. Burton, H. E. Chinneck, *A. B. Cocker, *H. J. Cole, H. S. Cranston, A. D. Crofts, H. Croot, E. Farrant, F. N. Fox, A. L. George, A. Goodey, T. H. Griffin, H. W. Gwyther, †N. James, F. H. Lennox-Jones, H. W. Jones, C. J. Lamb, J. G. Morrell, L. U. Ransford, P. Scott, E. O. Stevens, J. Stevens, W. S. Stevens, H. Thacker, †T. Vernon, †E. White, *H. L. Whitlow.

* Mechanical Dentistry only.

† Dental Metallurgy only.

Guy's Hospital Clubs' Union.

ANNUAL REPORT: 1900-1901.

The Council of the Clubs' Union have much pleasure in presenting the Ninth Annual Report of the progress of the Union, together with a statement of the Receipts and Expenditure for the year ending March 31st, 1901.

The number of members of the Union continues to increase, the increase this year being 66 as against 94 last year. The present total membership is 2113, of whom 1974 are life members, 100 subscribers, and 39 patrons. The continued support accorded by the Governors of the Hospital and by old Guy's men is most gratifying to the council.

We again venture to point out to old Guy's men who have not paid their guinea subscription for life membership the advantages of having their names and addresses in the Clubs' Union Blue Book, which is a useful directory, and is much used by members who wish their patients, when away from home, to be looked after by Guy's men.

The council regret to report that, as will be gathered from the following statement, the financial position of the Union is at present far from satisfactory.

The net income for the year, deducting balance from last year, amounts to £1,621 5s. 11d. Last year the net income was £1,755 8s. 1d. *The income is, therefore, £134 2s. 2d. less than last year*, the diminution being due to the fact that the amount received from donations and subscriptions shows a decrease of £137 13s. 6d. *Last year, moreover, the income was £126 3s. 2d. less than the previous year*, mainly from the same cause.

The total expenditure for the year amounts to £1,858 6s. 9d. or £36 3s. 10d. less than the previous year. This expenditure includes the repayment of a loan of £200. The true expenditure for working expenses, therefore, amounts to £1,658 6s, 9d. or £37 0s. 10d. more than the total income, *so that there is an actual loss of £37 0s. 10d. on the year's working*, in spite of the fact that the expenses have been cut down to the extent of £36 3s. 10d.

The council, therefore, beg to call the attention of their successors to the serious position demonstrated by the above statement, and would suggest that the new council

should consider the possible means of increasing the income of the Union, in view of the fact that no further diminution of expenditure can well be brought about.

The best thanks of the council are due to the officers of the constituent institutions, to the auditors, and to Mr. Croucher and other members of the School Office Staff, for their able assistance.

(Signed) LAURISTON E. SHAW,
May, 1901. Chairman.

Statement of Receipts and Expenditure from 1st April, 1900 to 31st March, 1901.

1900	Receipts.	£ s. d.	£ s. d.
April 1			
To Balance at Bankers... ...		352 17 3	
Petty Cash balance in hand...		1 0 3	
			353 17 6
August 31			
To Subscriptions and Donations from April 1st to Aug. 31st, 1900...		292 19 6	
1901			
March 31			
To Subscriptions and Donations from Sept. 1st, 1900 to Mar. 31st, 1901		974 12 6	
		1267 12 0	
Less subscriptions returned		3 3 0	
			1264 9 0
Grant from Medical School 1900			100 0 0
Grant from Dental School 1900			15 0 0
Rent from Tenants			75 0 0
„ „ Lockers			8 12 6
"Blue Book" Advertisements			69 2 0
Sale of Railway Tickets ...			75 0 0
Deposit Interest			13 17 5
Fine			0 5 0
			£1,975 3 5

1901	Expenditure.	£ s. d.	£ s. d.
March 31			
By Grants to Constituent Institutions—			
Athletic Club		40 0 0	
Bicycle Club		11 13 0	
Christian Union... ...		5 19 8	
Cricket Club		17 15 4	
Debating Society ...		6 15 0	
Dental Society		9 13 10	
Football Club (Rugby) ... [2 years]		51 2 0	
Guy's Hospital Gazette		289 0 0	
„ „ Reports...		187 15 0	
Lawn Tennis Club ...		22 9 3	
Rifle Association ...		11 5 11	
Students' Club		323 13 8	
Swimming Club		2 4 1	
			979 6 9
Field Current Expenses ...		220 1 1	
„ Rent Account		218 10 0	
			438 11 1
Management Expenses—			
Printing and Stationery		1 13 4	
Secretarial Expenses ...		40 12 2	
Postage		2 9 0	
Insurance		1 7 0	
Production of "Blue Book"		85 6 2	
			131 7 8
Railway Ticket Deposit A/c			66 13 4
Rates and Taxes			41 15 11
Petty Cash Expenditure ...			0 12 0
Amalgamated Clubs' Account (Repayment of Loan) ..			200 0 0
Cash Balance at Bankers ...		116 8 5	
Petty Cash in hand		0 8 3	
			116 16 8
			£1,975 3 5

Audited and found correct,
(Signed) G. BELLINGHAM SMITH.
FRANK G. CROSS.
May 10th, 1901.
(Signed) FRANCIS J. STEWARD,
Hon. Sec.

Notice.

VACANT STAFF APPOINTMENTS.

The following Staff Appointments will become vacant at the end of the Academical year. Applications for appointment or reappointment should be made to the Treasurer, Superintendent's Office, Guy's Hospital, S.E., on or before Monday, June 10th, 1901.

Medical School.

Demonstrator of Anatomy (2).
„ „ Bacteriology and Sanitary Science (1).
„ „ Biology (1).
„ „ Chemistry (2).
„ „ Morbid Histology (1).
„ „ Physiology (2).
„ „ Psychology (1).
Medical Registrar (1).
Obstetric Registrar (1).
Ophthalmic Registrar (1).
Surgical Registrar (1).

Dental School.

Demonstrator of Practical Dentistry (5). Monday, Wednesday and Friday mornings; Tuesday, Thursday and Saturday mornings; Monday and Thursday afternoons; Tuesday and Friday afternoons; Wednesday afternoon.

Dental Anæsthetist (6). Monday, Tuesday, Wednesday, Thursday, Friday and Saturday mornings.

Demonstrator of Dental Microscopy (2).
Curator of Dental Museum (1).

Passim.

Why is it that a certain section of philanthropists, or rather zoophilists—for they can hardly be classed among those labouring for the good of mankind—go through life armed with spectacles which reduce them to a condition of obliquity of the moral vision? To them a stereoscopic view of a man's actions and motives is impossible, but so engrossed are they by the contracted and onesided aspect afforded them, that it is difficult to convince them of their mistakes.

This, however, by the way. We do not propose to open our columns to a discussion of the pros and cons in the anti-vivisection question. Some day a worthy champion of the class of scientists who have been branded with the somewhat loose and inaccurate title of vivisectors, will arise, and will enlighten the lay mind as to the credit side of the account, showing them what curative methods they continually employ without question, but with gratitude, of which, without such a branch of research, they would be deprived.

Our present purpose is to refute a statement concerning our Hospital, which appeared in a letter written by the Secretary of the National Anti-vivisection Society, and published in the issue of the *Times* of May 17th At a meeting of this society held on May 9th, the chairman, Lord Llangattock, attributed the respect which the society commanded to the way in which they conducted their controversy. Since he, at the same time, made a declaration to the effect that no public statement that their honorary secretary made had ever been shown to be inaccurate; since, too, this same infallible secretary then proceeded to make the statements to which we object, we feel that the present refutation may not be amiss.

Mr. Coleridge stated that thousands of pounds, with which scores of beds might be opened and maintained, were annually diverted from the hospitals to schools and colleges which published no accounts. He also charged Lord Lister and the Committee of the Prince of Wales' Hospital Fund with subsidizing out of this fund schools licensed for vivisection, to the detriment of hospitals free from any such connection.

Lord Lister's cause needs no champion, and his dignified reply, embodied in a letter to the *Times*, would satisfy anyone except the most unreasoning of bigots.

It was in a retort to this letter that Mr. Coleridge published figures showing the "increase in grants" made out of the general funds of certain hospitals to their medical schools since the inauguration of the Prince of Wales' fund in 1896. Of Guy's Hospital he writes:—

Date.	£ s. d.	Grant to Hospital from Prince of Wales' fund. Annual.	Special.	Increase in Grant from Hospital to School.
1896	116 16 8	—	—	—
1897	595 10 6	£6,600	£1,312 10 0	£478 13 10
1898	421 1 4	5,000	—	304 4 8
1899	401 5 4	5,000	—	284 8 8

We are unable to make any statement regarding similar tables relating to other medical schools; but, from information supplied by the secretary to the treasurer, we arrive at the following facts. In the first place, there is no such thing as a "grant" from the hospital funds to those of the medical school. The item in the hospital accounts of "Medical School Buildings—rates and external repairs," which Mr. Coleridge is pleased to regard as a "grant," is simply an outgoing paid by the hospital on buildings, which, under its constitution belong to the hospital absolutely, although used, and maintained, internally, by the medical school. Secondly, the deductions Mr. Coleridge seeks to make from the figures quoted are fallacious. In 1896 an alteration was effected in the close of the financial year so that the item in the 1896 accounts of £116 18s. 8d., covered a period of nine months only. A perusal of the expenditure under the same heading for previous years will show that the increase in 1897, the year in which the hospital first benefited by the Prince of Wales' fund, was a mere coincidence, and that it was not true that the payments

received from this fund are a factor in the case. For instance—years ending Lady-day, 1894, £371; 1895, £316; 1896, £447. Nine months ending December, 31st, 1896, £116. Years ending December 31st, 1897, £595; 1898, £421; 1899, £401.

From this it will be seen that there is no justification for Mr. Coleridge's inference, viz., that an extra "grant" of some hundreds of pounds has been made to the medical school from the hospital funds since the establishment of the Prince of Wales' Fund. It is sad to think that his record for unimpeachable accuracy has thus been broken, and he will do well to confine himself in future to harrowing the feelings of old ladies, instead of attempting to injure institutions which labour only for the public good.

We have received letters advocating the grant of an M.D. degree to conjoint men. These we are unable to publish this week, but will do so as soon as the exigencies of space allow.

The Royal Society has kindly presented to the hospital library the "Reports to the Malaria Committee," a series of pamphlets concerning one of the most important researches of the day. The names of the various authors of these "Reports" vouch for the interest and value of their contents.

The results of the recent final examinations for the F.R.C.S. are very gratifying as far as Guy's is concerned. We sent up nine men, and of these, five were successful, a proportion of passes of which we may well be proud. The new Fellows have our heartiest congratulations, the unsuccessful our best wishes for the future.

It is proposed to hold the annual dinner of the Guy's Hospital Colonial Club on Wednesday, 5th June, at the Holborn Restaurant. Past and present Guy's men who will be able to attend are requested to send their names to F. G. Gibson, the honorary secretary.

Any offers? The appended letter received by one of the house-physicians smacks quite of the good old times when the ardent anatomist prowled about armed with a spade and a dark lantern. The note paper used does not suggest abject poverty; the confession of a chronic infirmity which might possibly depreciate the article offered is proof of the honesty of the writer; while the desire for payment before delivery argues a business instinct utterly foreign to a mind diseased.

We may mention that the name subscribed is that of a lady. Possibly those horrid vivisectionists would like to get up a raffle for her, or to knock her down by auction without an anæsthetic. The epistle is as follows:—"Sir,—I am writing these few lines concerning myself. I have been told lately of a woman who sold her body to your hospital for dissecting after she shall die. I am quite alone, having no parents, friends, or relatives, and think I should like to do the same. I have suffered from asthma, I must tell you, for seven years; but should be glad to hear from you if you will be willing to have my body, and all particulars as to forms to go through. I should like all communications as private as possible, as there are several people I should *not* like to hear about what I propose doing. I am writing in the first instance as it is difficult for me to come on chance, not being able to work for some time and being in difficulties. I hope to hear by return, if possible, in favour of my offer, also the money would be very acceptable just now.—I remain, Sir, yours anxiously, ——."

Royal College of Physicians.

1901.

The following Lectures will be delivered at the College, Pall Mall East, on each of the following Tuesdays and Thursdays, at 5 o'clock:—

Croonian Lectures.—Dr. Halliburton, June 11th, 13th, 18th and 20th—"The Chemical Side of Nervous Activity."

Goulstonian Lectures.—Dr. H. Head, June 25th, 27th, and July 2nd—"On certain Mental States associated with Visceral Disease in the Sane."

By order of the President,

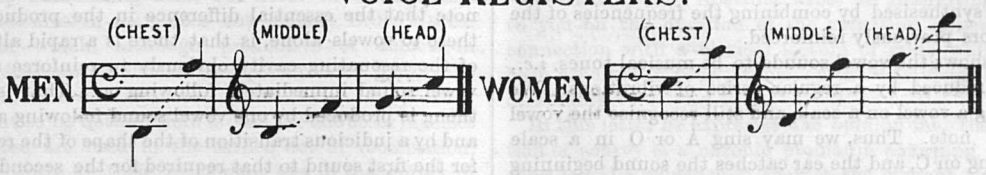
WILLIAM FLEMING,

Bedell.

The Voice and Speech.

Paper read before Guy's Hospital Physiological Society on 21st March, 1901, by R. LARKIN.
(*Concluded.*)

VOICE REGISTERS.



The voice registers may be considered to be the lower or chest, the middle, and small or head voice. The range of these registers is seen in the MSS. appended. The chest register in both sexes is, or should be, used in conversation and in the deep notes of the contralto. The position of the glottis and changes occurring in it as different notes are produced are as follows:—The epiglottis is pushed far back, and almost hides the larynx—the glottis is then an ellipitical opening extending from the posterior laryngeal wall to the front of the thyroid cartilage. In the production of the lower notes of this register, the cords vibrate in their whole length, breadth and thickness. The appearance produced is shown on the board. As the scale is ascended the arytenoids rotate inwards and touch one another. A chink now exists from the point where the arytenoids touch to the posterior surface of the thyroid cartilage. The opening now becomes smaller and smaller by approximation of the internal edges of the cords to each other in the postero-anterior direction, until a mere linear slit is produced by the contraction of the crico-thyroid. Moreover, as the note becomes higher so does the epiglottis widen itself from its first position and leave the cords exposed to view. At this point we have the cords at their highest tension. Before the voice can go out of this register and reach higher notes, or rather immediately it does so, there is a sudden change, and this lands it into the middle register. The change is brought about by the anterior fibres of the crico-thyroid *relaxing* while the thyro-arytenoid contracts so that the cords are narrowed and only their inner edges can vibrate. Tension is still maintained, however, by the contraction of the crico-thyroid. This sudden break is noticed in most voices, and it is the art of the voice trainer to minimise as much as possible the effect of this break. As Bosworth remarks, there is a sense of relief in passing from the highest note of the chest voice to the realms of the middle voice. This is always apparent to any singer and is due to the fact that less muscular action is required to throw the narrow part of the cord into vibration than was necessary in the lower register to throw the whole of the cord into vibration. The rise in pitch is due to the thinning of the cords. Voltolini invented a method by which instead of concentrating light from above, viâ the pharynx as in the laryngoscope, one might throw a strong light in front of the thyroid cartilage and then examine as usual by laryngoscope. Here the cords appear pink, and in the middle register they are finely transparent. In the whole of the middle register the vocal processes of the arytenoids are kept in close contact by the act of the lateral crico-arytenoid and posterior or transverse arytenoid.

The *head* register is the highest of the three registers and more limited in its range in man than in woman. Lehfeldt accidently discovered whilst experimenting with an excised human larynx that if a weak blast of air is passed through the organ a falsetto note is produced and from this he argued that this was the principle of their production. Müller adopted this view, and Oërtel holds that nodal lines are formed in the cords parallel to their edges. Hodgkinson insufflated powdered indigo into the larynx and found that the cords and the vocal processes of the arytenoids vibrated together. This experiment disposed of the assertion of some authorities who maintain that contact of the vocal processes is essential to phonation. Martel affirms that in the chest voice the whole cord vibrates, whilst in the head voice only the mucous membrane is in motion. The falsetto may be compared to the sound of a flute-organ pipe, and the chest sound compared to a reed pipe, the elastic tissue in the cords being brought into play for this. French has by means of photographs shewn that from the production of the lowest to the highest notes of the chest register the cords become elongated by about one-eighth of an inch; whilst in passing to the middle register the cords were shortened by one-sixteenth of an inch. As the head voice came in another lengthening took place.

The quality of the voice depends on the way in which the buccal cavity reinforces certain of the overtones natural to the fundamental tone emitted, just as the sounds emitted by an organ-pipe vary in their quality according to the shape, etc., of the resonating cavity of the pipe. In the buccal cavity we have a resonating cavity which can be altered at will by its muscles. The over-tones produced may override the fundamental tone and so obscure it to a certain degree. If a person is made to tone the vowel sounds on any particular note

we find that each vowel sound appears to the ear to have a pitch of its own different from that of the other vowels. Thus, in each vowel-tone there is one or a combination of partials which distinguish it from the others, and these have been analysed by Helmholtz. A person toned the vowel sounds on a certain note, say C, and the component vibrations which were particularly reinforced were picked out by resonators. The vowel sounds could then be synthesised by combining the frequencies of the resonators previously reinforced.

This shows the vowel sounds to be musical tones, *i.e.*, to be produced by a regular series of vibrations. We may sing a vowel on a scale and still recognise the vowel in each note. Thus, we may sing A or O in a scale beginning on C, and the ear catches the sound beginning on each note. The shape which the buccal cavity and pharynx assume in reinforcing the partials which are peculiar to the vowel tones A (ah), U (oo), and I (ee) can be seen on the board. The theories propounded from experiments done on the production of vowel tones date from 1829. In this year Willis imitated a larynx by means of a reed, above which he placed a resonating cavity. In 1837, Wheatstone made researches on the question. The great difficulty in drawing conclusions from experimental evidence lies in the fact that we may base our deductions on a relative or fixed pitch. Assuming that a vowel is always a compound tone, those who uphold the relative pitch state that if the pitch of the fundamental is changed, the pitch of the partial must undergo a relative change; whilst the upholders of the fixed pitch maintain that whatever may be the pitch of the tone emitted by the larynx the pitch of the partial peculiar to the vowel tone in question is always the same; in other words, that vowel tones have a fixed pitch.

In his early experiments Willis decided unquestionably in favour of fixed pitch for vowel tones. Donders, however, was the first to show that the cavity of the mouth varied with the vowel tone, which it was wished to reinforce. Helmholtz placed vibrating tuning-forks before the mouths of subjects uttering certain vowel sounds, and whose buccal cavity was, of course, in the proper position to reinforce those sounds, so that we may say the buccal cavity acted as a middleman to the tuning-fork and the larynx. He came to the conclusion that "The strongest resonance of the oral cavity depends solely upon the vowel, for pronouncing which the mouth has been arranged." He then carefully examined the form of the oral cavity for each vowel, and showed how slight changes would account for the quality being slightly altered for different dialects. An important summing up of Helmholtz is this: "Vowel qualities of tone consequently are essentially distinguished from the tones of most other musical instruments by the fact that the loudness of their partial tones *does not depend* upon their numerical order, but upon the absolute pitch of these partials." Hermann, however, considers that the mouth does not act as a mere resonator, but that for each vowel, in addition to the fundamental tone of the vocal cords, one, or it may be two other notes, not necessarily harmonics of the laryngeal note, but separated from it by a constant, or nearly constant musical interval are directly produced by the passage of the blast through the mouth. McKendrick considers that the "mouth and larynx" production of vowel sounds, namely, that of Hermann, is the probably correct one.

Turning now to the question of dipthongs, we are to note that the essential difference in the production of these to vowels alone, is that there is a rapid alteration of the resonating cavity obviously to reinforce another vowel sound immediately following on. That is a dipthong is produced by one vowel sound following another, and by a judicious transition of the shape of the resonator for the first sound to that required for the second sound, a blending and simultaneous abbreviation is produced.

Consonants differ from both the vowels and dipthongs, in that for their perfect articulation they require some obstacle in their path. In the case of the labials, as their name implies, we have a check in the form of the lips, whereas in a dental the teeth and tongue intervene. The back of the tongue and soft palate are the means of producing *gutturals*, as is evident by merely saying the word.

In the production of nasal sounds the mechanism is the same as for b, d, g, except that the posterior opening of the nares is left open, and the sound acquires its peculiar nasal resonance. The *aspirates* are produced by a simple blast of air through a narrow opening which may be at the throat as in 'h,' between the tongue and teeth as in 'th,' or between the lips and teeth as in ph or f. The effects of the cavities in connection with the larynx and pharynx may now be considered. The reinforcing tone of the trachea is far removed from the lower notes of the human voice. But it is probable that the trachea may resonate to some of the notes of the voice, and then produce an effect on their quality. It is very doubtful whether the laryngeal ventricles have any effect on the voice owing to their small size. These ventricles are well developed in the monkey, but completely absent in the lion. In the human subject the false vocal cords which bound the ventricles above have been shown by Wyllie to act like the mitral valves in the heart on pressure being made from below. So that the principal function of the false cords is to close the glottis tightly against an expiratory blast of air, and thus enable an animal to fix the ribs for effort. This is borne out by the fact that largely developed false cords are found in animals used to climbing, also in animals that vomit frequently and require a fixation of the thorax for that purpose. The other cavities confer a ringing character to the voice, and if these are affected by catarrh, the voice has a muffled quality.

Where do we consider the centre in the brain for the production of phonation and vocalisation to be? Is there only one centre for both of these or does each have a separate locality in the cortex. This, I believe, may be answered in favour of the latter view. It is possible, pathologically, to have a subject who can

vocalise to a certain degree, but cannot phonate. The centre for speech in the brain is situated, as is well known, in the posterior third of the inferior frontal convolution of the left side, just at the commencement of the ascending frontal convolution. If we stimulate this area—Broca's area—we get a strong abduction of the vocal cords. We can only get abduction of the cords in the cat or dog by stimulating here, but never in the monkey. The motor area in man does not include Broca's area, lesion of which, although productive of defects in speech, does not produce actual paralysis of the organs of speech, such as tongue and larynx.

A point to be noticed here is that the adductor muscles of the cord are used in the skilled act of vocalisation, and the centre for their movement lies in the cortex of the brain, and has been localised in the anterior two-thirds of the left inferior frontal convolution, that is just in front of the area of Broca. On the contrary, the muscles producing abduction of the cords, and which therefore are not concerned in the production of voice, but in respiration, have their centre in the medulla.

Section or paralysis of the superior laryngeal nerve causes hoarseness, and renders the production of high sounds an impossibility, owing to paralysis of the crico-thyroid, whilst section or paralysis of the inferior laryngeal causes aphonia and dyspnœa. Interference in the brain between the higher cerebral centre and the medulla of one side, as by rupture of an artery and an effusion of blood into the posterior portion of the internal capsule (giving rise to hemiplegia of the opposite side of the body) is not followed by loss of voice. It is possible to have the function of speech absent, and of this aphasia three degrees may be recognised :—

1. Defect of speech—Partial aphasia.
2. Loss of speech—Complete aphasia.
3. Loss of gesture or pantomime.

In complete aphasia the patient does not speak intelligibly. He can only utter, if utter at all, mere jargon. Apart from speech his articulatory and vocal organs may be unaffected and he may be very likely able to sing —He may even retain the propositional, "Yes" or "No." He may have the interjectional use of "oaths" that cannot be repeated at will. In rare instances a question is asked, or a proposition stated, but always under the influence of emotion. Some of these instances shew that there is not only retention of some words, but of some speech by the right side of the brain.

Loss of speech due to permanent destruction of the left area of Broca has been recovered from, and that this recovery is due to the supplemental action of the corresponding region of the right hemisphere is proved by the fact that in some of these cases speech has been again lost when a fresh lesion has occurred in the right hemisphere over the same locality. We may have aphasia of certain kinds from inability to express words heard or seen produced by lesions in sensory areas.

This asphasia may be termed sensory asphasia—there being word blindness and word deafness, and the lesions causing these are situated in the occipital and temporal regions respectively

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

Scurvy and Antiscorbutics.

DEAR SIR,—Mr. Koettlitz wrote an interesting letter to you on the question of the causation of scurvy, in connection with a clinical lecture of mine which had been reported in your journal, on the "Artificial Feeding of Infants."

In this letter he expresses the opinion that the causation of scurvy is a chronic ptomaine poisoning, and he considers the evidence is against the current view that the cause is some deficiency, in an essential element, in the diet.

That our knowledge on the subject is imperfect, would be allowed on all hands, but a reconsideration of the whole subject convinces me that the evidence is overwhelming in favour of the current view, that the disease arises from a lack of some essential element, and not from the food having been allowed to become tainted.

Several large treatises on medicine have appeared in England, America, France, and Germany within the past ten years, in which the subject has been fully reconsidered, and by none of the authors has Mr. Koettlitz's view been accepted, nor has any strong evidence been adduced in its favour.

I have been unable to ascertain anything about Professor Torup's views, beyond what is stated in the article, nor upon what evidence they may be based, as he does not appear to have published anything on the question.

The main evidence, therefore, upon which Mr. Koettlitz relies are the experiments of Dr. Vaughan Harley and Mr. F. G. Jackson, and although they succeeded in producing a toxic enteritis by feeding animals on putrid food, they cannot be said to have produced scurvy. The following were the experiments :—

(*a.*) Six monkeys were fed upon fifty grammes daily of sound tinned meat, with boiled rice and maize. These were the control animals, and they all died as the result of this absolutely unsuitable diet, living, on the average, 48 days. They all developed diarrhœa, and lived from four to ten weeks. None had blood or mucus in the stools, nor did their gums become spongy.

(*b.*) Eight monkeys were similarly fed, except that their meat was first allowed to become tainted. Seven developed diarrhœa. Five died, living on the average 35 days; but three were killed, in order that their blood might be examined, after 55, 62 and 65 days respectively; so that the average on the whole was over 45 days, possibly longer than the average life of the control animals. Six of them developed blood and mucus in their motions, but lived longer than the control animals fed on sound, but otherwise equally unsuitable food. In five, the gums became spongy, in one case, within two weeks. One lived 80 days, and had neither diarrhœa nor spongy gums.

(*c.*) Five monkeys were fed with tainted food, but had, in addition, an apple or banana as an antiscorbutic. Five developed diarrhœa, living on the average 74 days. Four developed blood and mucus in their motions, and in two, the gums became spongy. One lived 180 days; diarrhœa developed after 150 days; but no spongy gums or bloody motions. Ten out of the thirteen fed on tainted food developed bloody diarrhœa. The animals became emaciated and lethargic, but in none of them did purpura nor large subcutaneous hæmorrhages, such as are so characteristic of scurvy, develope. The blood showed 30 per cent. of hæmoglobin, and 89 per cent. of red corpuscles.

What conclusions can be drawn from these experiments? The diet, when sound, was so unsuitable that the animals rapidly died from intestinal trouble. It is of interest also to learn that when an animal is so fed, if the food is tainted, the gums become spongy, and the stools bloody; but this does not prove that the condition was identical with what we know as scurvy. In scurvy, constipation is the rule, except towards the end, while œdema, purpuric and large subcutaneous hæmorrhages are rarely absent for long. Moreover, improvement takes place within a few days in the most striking manner on the addition of suitable food.

Men may be fed on unsuitable food for a long time, before any symptoms of scurvy will develop, and there is no evidence that the disease can be produced under at least two months. Yet in these experiments the gums were spongy within two weeks, which suggests a different and much more acute process, and such as might be expected as a result of septicæmia.

The experiments increase our knowledge of food poisoning rather than of scurvy. Again, is it a matter of experience that those who consume tainted food develop scurvy? Dried, salted and tainted foods have for years been in daily consumption on board ship, and by the inhabitants of many countries, and yet scurvy does not break out.

Also, what is the evidence with regard to scurvy rickets? That is a disease synchronous with the introduction of sterilisation and the modern popularity of infant foods. It is the custom of feeding infants on sterilised prepared foods, and on sterilised milk which has led to the frequency of this disease, and it is among the well-off and the very careful that it occurs. I have more than once been told by the mother herself that the illness could not be due to the feeding, as she had seen to everything, and she was certain that not a particle of unsterilised food had passed her infant's lips since it had been weaned.

There is no evidence whatever that scurvy rickets is ever due to decomposition changes, which have taken place in the infant's food.

Let me now put forward a selection of instances of outbreaks, and these might be indefinitely increased, which appear to be inexplicable except on the assumption that the disease was due to some deficiency in the food, and in many of which a small addition to the diet at once dissipated the symptoms.

1. It was noted for many years at the Penitentiary at Millbank, that scurvy frequently occurred among the soldiers, most of whom were in for only short terms of imprisonment, while it did not often occur among those who were in for a long term; ultimately Dr. William Baly noting that the diet of the former was deficient in potatoes, at once put a stop to the difference by giving potatoes to them also. An extraordinary outbreak of scurvy developed in England after the potato famine in 1846.

2. American troops in 1820 on the march to Council Bluffs, lived from October onwards on salted and smoke-dried meats. In January scurvy first appeared, and was severe throughout the regiment in February, continuing unabated until April, when wild vegetables appeared.

3. Lancereaux reported in 1883 upon several small epidemics in the prisons of the Seine, and found that they occurred in the same establishments, and for several years at the same time of the year, and corresponded with the suppression, owing to their scarcity, of green vegetables and of potatoes in the diet, and that when they were again administered, the scurvy disappeared.

4. Srive pointed out that at Sebastopol, scurvy increased in the armies at two seasons of the year. In the very hot dry weather in the summer, and in the very cold weather in the winter, at both of which seasons no fresh vegetables could be obtained.

5. In 1841 Lord Anson lost two hundred out of five hundred men from scurvy. He landed a boat at Juan Fernandez, and told the men to procure any green food they could find. They loaded up with weeds, which the men ate and found them most efficient in putting a stop to the scurvy. At St. Helena, also, fresh watercress has, in days gone by, when scurvy was prevalent, often put a stop to scurvy within three days.

6. In 1780 the number of cases of scurvy received into Haslar Hospital was 1457; in 1806 and again in 1807 only one case. This sudden improvement was associated with the serving out of lime-juice on board all ships, and was not due to the absence of tainted food. The salt junk and mouldy biscuits forming the staple of their diet, as before.

Here are a series of instances in which scurvy at once cleared off with a small addition to the diet, and was directly due to this change. What evidence is there that the disease in any of these cases arose from decomposition of the food, for if it were how can we explain the rapid recoveries, when the main articles of diet were still consumed?

Since 1873 there has been some recrudescence of scurvy in the merchant service, and lime-juice appears to be less efficient now than formerly in preventing the disease. May this not be due to the mode in which it is preserved. In Mr. Koettlitz' last expedition the juice was evaporated down to diminish its bulk, some of the essential oils were lost by evaporation, and its efficiency may have thereby been impaired. The more certainly fruits, vegetables,

and lime-juice are prevented from decomposing, even when they have to be kept for long periods of time, the more probably are they deprived of their value in preventing scurvy. The more successfully they are prepared so as to keep good for long periods, the greater the necessity for supplementing the diet with other fresher foods; and in Arctic expeditions the use of blood, and the fresh flesh of birds, bears, or reindeer, or cranberries, has been found most successful. The objectionable fishy taste of the flesh prevents many of the men from taking it. It was the use of fresh rather than the nonuse of tainted meats, which I would contend, kept his men in their last expedition, free from scurvy.

Increasing experience has shown that while the use of lime-juice or fresh vegetables is generally efficient to prevent an outbreak of scurvy, some preparations have been found to be useless. This has occurred especially in Arctic Expeditions, and its inefficiency is most marked in the second or third year, and may possibly be due to gradual changes, the result of the long time the juice has been kept. The method generally adopted to preserve the juice from change is to add 10 to 15 per cent. of rum or other spirit to it.

It has now been shown by several Expeditions, that the daily consumption of some fresh blood or meat, is capable of enabling health to be preserved, when the diet has otherwise consisted of preserved foods. In this there has been a marked change of opinion in recent years.

In wishing him every prosperity in his coming expedition, I believe that a completely successful sterilization of all the food, would lead as certainly to scurvy as it does in an infant, unless the diet is supplemented by *food that has not been sterilized.*

I trust that the interest of the subject and the importance of the views I would controvert, may be accepted as some excuse for the length to which this letter has extended.—I am, yours faithfully,

May 20th, 1901. G. NEWTON PITT.

The Antarctic Expedition.

Dear Sir,—I notice that you are asking for subscriptions towards the equipping of a bacteriological laboratory in connection with the Antarctic Expedition. If not too late I should like to add my mite. Up here in the bush one has no means of transmitting money, so that I cannot "enclose my subscription." My brother, however, will, on receipt of this letter, give you a cheque for one guinea. That antarctic expedition ought to do good work if all the members are as great enthusiasts as Dr. Koettlitz. Wishing the project every success, I am, yours faithfully,

STANLEY HODGSON.

Subrie, Sefur District,
Gold Coast, West Africa.
March 8th, 1901.

South African Memorial Fund.

Sir,—Will you have the goodness to accept the enclosed cheque for one guinea, as my subscription towards the South African Memorial Fund.—I have the honour to be, your obedient servant,

STANLEY E. DENYER, M.B.

Guy's Hospital, S.E., May 14th, 1901.

Nursing News.

Matron's Office.

On May 14th, Nurse Ramsey left the hospital on completion of her three years' training, and Nurse Palmer was appointed to succeed her as Head Nurse in the Theatre.

On May 16th, Nurse Green left the hospital on completion of her three years' training, and Probationer Vivian was appointed to succeed her as Head Nurse in Lydia ward.

On May 22nd, Nurse Swadling left the hospital on completion of her three years' training, and Probationer Lindon was appointed to succeed her as Head Nurse in Job ward.

From the Gazette's Special Pathologist.

NOTICES.

Specimen received April 24th, name and address of sender not given.—On section this specimen shows much inflammatory thickening of the submucous tissue, and fibrosis of the adjacent bundles of muscle. There are no indications of malignant growth.

C.T.B M., Manchester.—This portion of breast shows chronic lobular mastitis with atrophy of the glandular acini. Some of the smaller ducts exhibit signs of epithelial proliferation, but there is no invasion of the adjacent tissues. The cysts are due to retention of secretion in obstructed ducts.

H.V.H., Wanstead.—The centrifugalised deposit from the urine contained a fair number of hyaline and finely granular casts, renal cells, red blood discs and crystals of calcium urate and triple phosphate.

H., Reigate.—Tubercle bacilli were present in fair quantity in the sputum.

E.R.M., Hastings.—The specimen contained numerous streptococci, but the tubercle bacillus was not found.

G.E.H., Ramsgate.—Reaction acid, sp. gr. 1024, albumen, a fair amount; sugar absent; blood, a considerable quantity. Microscopical examination of the centrifugalised deposit: There was a fair quantity of material consisting principally of blood, calcic oxalate crystals and squamous cells; a few hyaline and granular casts were detected. There was no excess of leucocytes, and no renal pelvic cells were detected.

H.G.A., Nottingham. — The tinea tonsurans was present in the hairs (marked Jack.)

H.G.A., Nottingham. — The tinea tonsurans was present in the hairs (marked Hugh.) PATHOLOGIST.

Sport.

Cricket.

GUY'S v. BRENTWOOD

On Saturday, May 11th, this match was played at Brentwood on rather a soft wicket. Winning the toss, Guy's batted first, but fared very badly, only being able to put together a total of 109. Brentwood then went in, and after starting very slowly, thoroughly collared the bowling, scoring 289 for six wickets. Von Someran and Thornton were the highest scores, making 82 and 56 respectively. Scores:

GUY'S.

E. A. Collins, c & b Von Someran	4
G. S. Graham-Smith, b Von Someran	4
H. Barber, c & b Berkley	9
R. C. Poyser, b Claughton	19
H. M. Langdale, c Von Someran, b Ramsay	30
F. Morres, c Von Someran, b Thornton	0
A. L. Foster, b Thornton	0
M. C. Wetherell, c De Winton, b Thornton	8
H. R. Grellet, c Curgenven, b Ramsay	4
C. M. L. Cowper, not out	11
J. S. Booklers, c Von Someran, b Berkley	12
Extras	8
Total	109

BRENTWOOD.

C. H. Escott, st Graham-Smith, b Poyser	10
R. J. Thornton, b Booklers	56
S. De Winton, lbw, b Wetherell	10
W. Von Someran, c Langdale, b Morres	82
Rev. H. S. Curgenven, b Barber	41
Major Claughton, c Wetherell, b Morres	2
A. E. Heatley, not out	43
Rev. M. Berkley, not out	34
Extras	11
Total (6 wickets)	289

C. E. Lewis, R. A. Ramsay, — Eley, did not bat.

GUY'S v. SURBITON.

In beautiful weather, this match was played on Saturday, the 18th, at Surbiton. Guy's went in first, Barber having again won the toss, but compiled only a moderate score of 155. This did not prove to be sufficient, as Surbiton replied with a total of 269, thus winning by 134 runs. L. J. Moon batted well, and had hard luck in not reaching the century.

GUY'S.

E. A. Collins, c Bryant, b Scarfe	36
R. C. Poyser, c Francis, b Finlason	3
H. Barber, c Francis, b L. J. Moon	17
H. M. Langdale, b L. J. Moon	6
F. Morres, lbw, b Scarfe	10
A. L. Foster, c Taylor, b L. J. Moon	22
G. S. Graham-Smith, c Hickson, b Scarfe	9
T. Wyatt, not out	28
M. C. Wetherell, b Finlason	11
J. S. Booklers, b Finlason	6
C. M. L. Cowper, c Hickson, b Scarfe	1
Extras	6
Total	155

SURBITON.

S. S. Taylor, b Foster	13
L. J. Moon, c Collins, b Booklers	95
W. G. Davenport, c Graham-Smith, b Foster	17
C. E. Finlason, c Wetherell, b Booklers	13
F. H. Bryant, c Poyser, b Wetherell	12
F. P. Francis, c Barber, b Wyatt	27
G. A. E. Hickson, b Booklers	8
P. Castle, b Wetherell	7
A. J. Flemming, not out	33
C. Scarfe, c Wetherell, b Wyatt	0
W. E. Fiske, c Poyser, b Wyatt	23
Extras	21
Total	269

GUY'S 2ND XI. v. ST. THOMAS'S HOSPITAL 2ND XI.

Played at Chiswick on May 15th, and resulted in a draw, greatly in our favour. Langdale played an excellent innings of 101, and was ably assisted by the veteran Morgan, Wyatt, and Willan. Scores:—

GUY'S.

H. M. Langdale, c Hanbury, b Mould	101
M. C. Wetherell, b Henderson	0
S. C. Bowle, b Mould	14
J. Booklers, b Mould	0
H. M. Tolhurst, b Mould	8
T. Morgan, st Hanbury, b Gibb	34
H. T. Palmer, lbw, b Gibb	7
R. Willan, not out	21
H. Wyatt, not out	30
Extras	12
*Total (7 wickets)	227

*Innings declared closed.

J. Donnell and J. Goss did not bat.

ST. THOMAS'S.

W. Denniston, c Tolhurst, b Wyatt	0
R. J. Thompson, c Booklers, b Wyatt	24
L. F. Hanbury, b Bowle	28
S. J. Fielding, b Wetherell	2
R. Mould, b Bowle	5
S. R. Gibbs, not out	31
H. C. Devas, b Bowle	10
T. W. Downes, b Bowle	18
H. S. Sington, b Wyatt	0
A. Hutchinson, not out	3
Extras	9
Total (8 wickets)	130

H. Read did not bat.

GUY'S 2ND XI. v. THE HOS.-SCHO.

Played at Honor Oak on Saturday, May 18th, and resulted in a win for us. Our opponents declared with 159 for 8 wickets, leaving us exactly 1 hour and 25 minutes to get the runs in; which we succeeded in doing very close on time, thanks mainly to a good start by Tolhurst and Norton and a fine effort by Jackson at the last moment. Scores:—

GUY'S.

H. M. Tolhurst, run out	57
E. L. Norton, c & b Pelling	32
A. H. Turner, b Bailey	4
T. A. Chignell, not out	30
R. Willan, c Pelling, b Bailey	12
H. T. Palmer, b Bailey	0
F. D. S. Jackson, not out	35
Extras	4
Total (5 wickets)	174

T. P. Thomas, E. W. Strange, R. C. Lawry, and W. M. Robson did not bat.

HOS.-SCHO.

W. Hussey, b Chignell	13
A. W. Pelling, b Chignell	0
W. Clark, b Norton	38
F. Bailey, b Chignell	7
G. Arnold, b Chignell	57
H. Reid, b Norton	1
J. Jagger, b Norton	25
E. Lyons, c Palmer, b Chignell	5
Galley, not out	9
Extras	4
*Total	159

*Innings declared closed.

King and Wood did not bat.

GUY'S 2ND XI. v. ST. MARY'S HOSPITAL 2ND XI.

Played at Honor Oak on Wednesday, May 22nd, and resulted in an easy win for us by 141 runs. Scores:—

GUY'S.

H. M. Tolhurst, b Ollerhead	9
A. H. Turner, lbw, b Bennett	1
S. C. Bowle, c Luxmore, b Bennett	87
J. A. Chignell, c Ollerhead, b Stephens	30
C. M. L. Cowper, b Jones	25
H. J. Palmer, b Bennett	13
J. Donnell, c Ollerhead, b Jones	0
J. Goss, c Nix, b Bennett	3
E. W. Strange, not out	11
G. Carlisle, b Ollerhead	13
— Fox, not out	11
Extras	24
*Total (9 wickets)	227

*Innings declared closed.

ST. MARY'S.

H. S. Ollerhead, b Cowper	36
S. Nix, b Chignell	11
J. B. Stephens, b Cowper	7
J. H. O. Page, c Strange, b Chignell	6
F. C. H. Bennett, b Cowper	0
S. W. Jones, c Tolhurst, b Chignell	6
E. J. H. Luxmore, b Chignell	4
E. A. W. Alleyne, c & b Cowper	5
C. Russ, b Cowper	1
A. R. Finn, hit wkt., b Chigwell	0
E. A. Price, not out	3
Extras	7
Total	86

In their 2nd Innings St. Mary's got 52 for the loss of four wickets.

Guy's Hospital Lawn Tennis Club.

GUY'S v. S. CROYDON.

Played at Croydon, Saturday, May 11th, and resulted in a win for the home team by 3 events to 6. This was our first match of the season, and Wedd and Lucas were the only couple who were in anything like good form.

Jupp and Bacon lost to Bell and Goodsir, 2–6, 3–6; lost to Jephson and Kent, 2–6, 2–6; beat Thomas and Thomas, 6–1, 6–4. Wedd and Lucas beat Jephson and Kent, 6–3, 3–6, 6–3; lost to Bell and Goodsir, 5–7, 4–6; beat Thomas and Thomas, 6–2, 4–6, 6–2. Cooke and Winckworth lost to Thomas and Thomas, 4–6, 4–6; lost to Jephson and Kent, 0–6, 6–8; lost to Bell and Goodsir, 4–6, 2–6.

GUY'S v. BLACKHEATH "A."

Played Saturday, May 18th, at Blackheath, and resulted in a win for Blackheath by 3 matches to 6. Wedd and Lucas again played well, and won all their matches; but our first and third couples were beaten in all their events, and we hope they will get into better form by next Saturday. Bacon was unfortunately obliged to scratch on Saturday morning, so H. K. Lacey played for us.

Jupp and Lacey lost to Soloman and Reef, 2–6, 3–6; lost to Dinwiddy and Dinwiddy, 1–6, 2–6, lost to Pilling and Gordon, 3–6, 5–7. Wedd and Lucas beat Dinwiddy and Dinwiddy, 4–6, 7–5, 6–4; beat Soloman and Reef, 7–5, 6–4; beat Pilling and Gordon, 6–3, 5–7, 6–4. Cooke and Winckworth lost to Pilling and Gordon, 3–6, 1–6; lost to Soloman and Reef, 4–6, 2–6; lost to Dinwiddy and Dinwiddy, 4–6, 2–6.

GUY'S HOSPITAL 2ND v. ADDISCOMBE.

Played on May 11th at Honor Oak; resulted in a win for Addiscombe by 5 matches to 3.

J. K. Lacey and Fremantle beat Foster and Kingston, 6–2, 6–4; draw C. H. Bacon and E. F. Warren, 6–8, 6–0, 4–4; beat H. P. Warren and Jackson, 6–3, 8–6. Steele-Perkins and Davies-Colley lost to Foster and Kingston, 6–3, 3–6, 1–6; lost to C. H. Bacon and E. F. Warren, 2–6,

6–3, 2–6; beat H. P. Warren and Jackson, 6–3, 1–6, 6–3. Glendenning and Harper lost to Foster and Kingston, 2–6. 1–6; lost to C. H. Bacon and E. F. Warren, 0–6, 0–6; lost to H. P. Warren and Jackson, 1–6, 1–6.

Guy's Hospital Swimming Club.

GUY'S v. TADPOLES.

Played on Monday, May 13th, at Southwark. Guy's won the toss and defended deep end. Tadpoles scored three goals first half. Guy's played up better second half but were unable to score, and were beaten 4—0.

GUY'S v. WOODSIDE.

Played at Southwark, May 17th. Guy's did not have full team; after a good game we were beaten by 2—1. Moon played a good game and scored the goal.

GUY'S v. BRUNSWICK.

SURREY COUNTY.

Played at Camberwell Baths on Monday, May 20th. Guy's won the toss, and Moon scored soon after the start. Brunswick equalised before half-time. In the second half Guy's played up hard, and soon led by 3 goals to 1. Brunswick then pressed and scored 3 goals before the end, and won after a hard game by 4 goals to 3. Moon was very good forward, and Bacon invaluable in goal. Team:—

GUY'S.—H. Bacon (goal); R. C. Green, R. B. Dawson (backs); L. U. Ransford (half-back); A. L. Moon, V. Cameron, T. B. Layton (forwards).

Shooting Club.

ARMITAGE CUP INTER-HOSPITAL COMPETITION

Teams of six men, first day, Saturday, 18th May:—

O. B. Travers	28	30	23	= 81
J. A. Cooper	28	30	16	= 74
R. Felton	28	20	24	= 72
F. Keates	22	23	19	= 64
G. Hodson	22	10	3	= 35
G. Pollard	19	2	9	= 30
Grand Total				356

Papers by Guy's Men.

Local *v.* General Anæsthesia in certain cases of Abdominal Surgery. By Thomas H. Morse, F.R.C.S. Eng.—*The Lancet*, 11th May.

The Practice of Blood-letting. By J. F. Briscoe, M.R.C.S.—*The Clinical Journal*, 22nd May.

Appointments.

CIVIL.

BROWNFIELD, H.M., L.R.C.P. Edin., M.R.C.S., has been appointed Certifying Surgeon under the Factory Acts, for the Petersfield District of Hampshire.

CLOWES, E. F., L.R.C.P. Lond., M.R.C.S., has been appointed Certifying Surgeon under the Factory Acts, for the Wotton-under-Edge District of the County of Gloucester. Also Medical Officer for the Charfield and Tortworth District, by the Thornbury (Glos.) Guardians and District Council.

REYNOLDS, B. Gore, L.R.C.P. Lond., M.R.C.S., has been appointed District Medical Officer, Parish of Hammersmith.

SANDOE, J. W., M.D. Durh., L.R.C.P. Lond., M.R.C.S., has been appointed District Medical Officer, St. Thomas's Union, Devon. *vice* J. Somer, resigned.

NAVAL AND MILITARY.

Staff Surgeon W. W. PRYN, R.N., has been appointed to the *President*.

Surgeon H. E. C. FOX, R.N., has been appointed to the *Duke of Wellington*, for disposal.

Surgeon-Lieutenant H. M. BROWNFIELD, 3rd (Duke of Connaught's Own) Volunteer Battalion the Hampshire Regiment, is promoted to be Surgeon-Captain.

The King has conferred the Volunteer Officers' Decoration on Surgeon-Captain CHARLES SAGE TICEHURST, 3rd (Duke of Connaught's Own) Volunteer Battalion the Hampshire Regiment.

Births.

LANSDALE.—On May 9th, at Trinity Square, S.E., the wife of William Lansdale, M.D., M.R.C.S,, L.R.C.P. Lond., D.P.H., of a son.

TAYLOR.—On May 9th, at Eland House, Rosslyn Hill, Hampstead, N.W., Huldah, the wife of E. Claude Taylor, M.D., M.S., of a son.

Marriage.

HOLMAN—WHARTON.—On the 11th inst., at St. Peter's Church, Belsize Park, N.W., by the Rev. Dr. Tremlett, assisted by the Rev. J. C. Hose, Frank Kay Holman, L.R.C.P. Lond., M.R.C.S., younger son of the late John Rudall Holman, M.D., R.N., to Mildred, only daughter of James Wharton, of Edgehill, Netherhall Gardens, Hampstead.

Death.

HARTREE.—At Cranmer Road, Cambridge, John Penn Hartree, M.A., M.B., aged 57.

ED.—F. G. G.

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Calendar of Coming Events.

June, 1901.

Sat. 8.—Messrs. Lucas and Lane's take-in; Drs., G. E. Malcolmson and G. T. Wrench; Cl., J. A. Andrews.
July Appointment List closed.
G.H.C.C., I. v. Brentwood, home.
G.H.L.T.C., I. v. Kent, home.

Mon. 10.—1.15 p.m., Clinical lecture by Mr. Brailey.
Cambridge 1st and 2nd M.B. Exams begin.

Tues. 11.—Application to Medical School Office for Schedules for Final Conjoint Exam. to be made not later than this date.
Mr. Rowell's Demonstration on Anæsthetics.

Wed. 12.—1.30 p.m., Clinical lecture by Dr. Hale White.
G.H.C.C., I. v. Hornsey, away.
II. v. City of London School, home.
G.H.L.T.C., II. v. Bromley, away.

Thur. 13.—Messrs. Golding-Bird and Dunn's take-in; N. N. Houghton and W. H. Cole; Cl., E. C. Bevers.
G.H.C.U., Address by J. P. Barnes, Esq.

Fri. 14.—1.15 p.m., Clinical lecture by Mr. Dunn.

Sat. 15.—G.H.C.C., I. v. New College, away.
II. v. St. Bart.'s, away.
G.H.L.T.C., I. v. East Croydon, home.
II. v. St. Thomas's, away.

Mon. 17.—1.15 p.m., Clinical lecture by Mr. Targett.

Tues. 18.—Mr. Rowell's Demonstration on Anæsthetics.

Wed. 19.—1.30 p.m., Clinical lecture by Dr. Hale White.
G.H.L.T.C. I. v. Wanstead, home.

Thur. 20.—Messrs. Jacobson and Fripp's take-in; Drs., C. J. Pinching and O. W. Richards; Cl., E. F. G. Heap.
G.H.C.U., Missionary Meeting.

Fri. 21.—1.15 p.m., Clinical lecture by Mr. Dunn.

Sat. 22.—G.H.C.C., I. v. Past, away.
II. v. Old Charlton, home.
G.H.L.T.C. I. Past v. Present, home.
II. v. Addiscombe, away.

Guy's Hospital Gazette.

JUNE 8, 1901.

Anæmia.

CLINICAL LECTURE BY DR. BRYANT.
May 15th, 1901.

GENTLEMEN,—Since taking charge of the Clinical wards I have had under my care some interesting cases of Anæmia, the series including examples of pernicious anæmia, chlorosis, splenomedullary leuchæmia, Hodgkin's disease and anæmia secondary to menorrhagia, Bright's disease and plumbism. I propose, therefore, in the first place to discuss with you the differential diagnosis of the various causes of anæmia, to describe to you the characteristic changes which are found in the blood in these different forms of anæmia with special reference to their diagnostic value and, if time allows, to tell you something about the pathology and treatment of these conditions.

I will read you an account of one of the most interesting cases, from the careful notes taken by Mr. Heap, and it will serve as a peg on which to hang the remarks I wish to make to you on the method of arriving at a conclusion as to the nature or cause of the anæmia. You will also see by the results of the blood examinations and the description of the general condition how much the patient has been benefited by the treatment.

Charlotte W., 49, was admitted on April 4th for vomiting, palpitation and pain in the precordial area. She is married: she has no children; twenty years ago she had a miscarriage. Since last October she had been in Croydon Hospital, and she states that the diagnosis made there was acute dyspepsia. She says she has occasionally suffered from rheumatic pains, but has never been laid up with a definite attack of rheumatic fever. When 19 she was in the Brompton Hospital for consumption, and she states that she was cured,

and that since she has had no further lung trouble.

She has had no menstural period for the last three years. With regard to her present illness, she considers it followed a strain from lifting a heavy bath in October last, for two hours afterwards she suffered from severe pain in the abdomen; vomiting and diarrhœa followed and lasted for several days. Since October she has been able to do very little work on account of the vomiting; sometimes she is sick two or three times a day. She suffers a good deal from flatulence, and says the vomit is abundant, watery and frothy. Pain and palpitation come on with the least excitement or exertion. She has never vomited blood.

Condition on Admission.—She was markedly anæmic. The lips were almost colourless and the skin had a peculiar light yellowish tint. The mucous membranes were very pale. There was a little tenderness in the epigastric region and the stomach appeared to be slightly dilated. There was marked pulsation of the abdominal aorta. The liver and spleen were not enlarged. The pulse was regular. The cardiac impulse was in the fifth left space inside the nipple line. There was no thrill. The cardiac dulness was not increased. There was an apical systolic bruit which could be traced outwards as far as the anterior axillary line. There was another systolic bruit audible in the second right space about half an inch from the right border of the sternum.

The urine was 1012 sp. gr.; there was no albumen or sugar; it did not appear to be abnormally dark.

On April 5th she was not so well; she complained of nausea, weakness and lassitude and was even more anæmic than when admitted; she was ordered—

Liq. Arsenicalis	...	... ℥v.
Ferri et Ammon Cit.	...	gr. vi.
Inf. Quassiæ	...	... ℥i. t.d.s.

On the 10th she was still suffering from the nausea and vomiting. A blood examination was made. The blood flowed freely from a prick in the lobe of the right ear; it was very pale and watery-looking. The red blood corpuscles numbered 650,000 to the cubic millimetre; they were very variable in size and form; the majority appeared to consist of macrocytes; there were, however, a good many microcytes and poikilocytes.

Several nucleated red corpuscles were seen, they were mostly normoblasts, but a few megaloblasts were seen. The percentage of hæmoglobin was 26 (Von Fleischl's hæmoglobinometer). The colour index was therefore 2. The white blood corpuscles numbered 7,000 per cubic millimetre.

The differential count showed—

Polymorphonuclear cells	...	58 per cent.
Small lymphocytes	...	30 "
Large "	...	9 "
Eosinophiles	...	3 "
		100 per cent.

Glycerine extract of bone marrow ℥i., t.d.s. was ordered but soon had to be omitted, as she attributed her subsequent sickness to it.

Her teeth were very carious and there was well marked pyorrhœa alveolaris. This was treated with the frequent application of an antiseptic mouth wash containing myrrh and chinosol. Cultures were taken and microscopical preparations were examined. A large number of bacilli and cocci were found. Some streptococci were found in the cultures. The bacilli were not identified.

On the 13th one minim keratin coated tabloids of creosote were ordered, two being administered three times a day. She had a severe attack of precordial pain, and on examining the heart an early diastolic murmur was heard in the third left intercostal space close to the border of the sternum. She was ordered—

Liq. Arsenicalis	...	... ℥v.
Inf. Quassiæ	...	... ℥j. t.d.s.

instead of the iron and arsenic mixture.

On the 20th she was better and the vomiting and nausea was much less frequent.

On the 25th she was much better and seemed to be less anæmic.

On the 28th her condition was very satisfactory. There was no vomiting and nausea. She was taking her food well, and a blood count showed a great increase in the number of red blood corpuscles, which came out at 2,600,000

per cubic millimetre. The arsenic was increased to seven minims three times a day.

On May 8th she was still feeling and looking much better, she had no nausea and was getting up and taking her food well. She was ordered bone marrow tabloids.

On May the 14th the blood was again examined, with the following result: Red blood corpuscles 1,800,000, white blood corpuscles 5,000, hæmoglobin 41 per cent.

You will see from the account of the case which I have just read, that the most prominent sign of a diseased condition was the marked anæmia. In making a differential diagnosis, the various causes which gave rise to anæmia, with their associated signs and symptoms, must be carefully weighed and considered. Following on the lines of previous clinical lectures, I shall therefore begin by putting before you a classified list of the most important causes of anæmia.

But first of all as to the meaning of the word anæmia.

It is a term used to denote more than one condition, for the definition includes a diminution in the quality of the blood (oligæmia), or a diminution in the number of corpuscles (oligocythæmia), or in the amount of hæmoglobin (oligochromæmia), or a combination of all three conditions. The pallor which is so characteristic of all anæmic conditions is due to a diminution in the amount of hæmoglobin.

The causes of anæmia may be classified in the following manner, which, however, is quite provisional:—

A. *Primary or essential*, in which there is no obvious cause.

B. *Secondary or symptomatic*, in which the anæmia is the result of loss of blood or is secondary to some definite disease or pathological condition.

A. Primary.
   1. Chlorosis.
   2. Pernicious anæmia.

B. Secondary or symptomatic.
   1. *From actual hæmorrhage.*
      Wounds.
      Epistaxis.
      Hæmatemesis.
      Hæmoptysis.
      Hæmaturia.
      Intestinal hæmorrhage.
      Hæmorrhoids.
      Uterine hæmorrhages, etc.
   2. *Blood diseases.*
      Purpura.
      Scurvy.
      Hæmophilia.
   3. *Parasitic diseases.*
      Anchylostomum duodenale.
      Bilharzia hæmatobia.
      Bothriocephalus latus.
      Filaria sanguinis hominis.
   4. *Toxic conditions.*
      Inorganic poisons.
         Lead.
         Mercury.
         Arsenic, etc.
      Organic.
         Syphilis.
         Malaria, etc.
   5. ? *Other toxic conditions.*
      After acute specific fevers.
      Malignant growths.
      Tuberculosis.
      Infective endocarditis.
      Bright's disease.
   6. *From malnutrition, inanition or defective assimilation.*
      Starvation.
      Stricture of the œsophagus.
      Carcinoma of the stomach.
      Gastric ulcer.
      Chronic dyspepsia and gastritis, etc.
   7. *Long continued drain of albuminous fluids from the body.*
      Discharging sinuses.
      Leucorrhœa.
      Prolonged lactation, etc.
   8. *Certain diseases of the spleen, lymphatic glands and bone marrow.*
      Spleno-medullary leuchæmia.
      Lymphatic leuchæmia.
      Splenic anæmia.
      Hodgkin's disease.

I have already mentioned that this classification is a provisional one. I do not claim that it is either perfect or complete. You will, however, find it convenient to have in your mind such a list of classified causes when you have

to investigate a case of anæmia with a view to finding out the cause or the nature of it.

I will now proceed to give you some idea as to the manner in which a diagnosis can be arrived at. The investigation may be divided into three stages.

1. The careful analysis of the history of the condition.

2. The careful physical examination of the patient.

3. The examination of the blood.

All possible causes of a secondary anæmia must be carefully excluded before a diagnosis of chlorosis or pernicious anæmia is made. In some cases the previous history is of great importance, in another case the physical examination of the patient reveals the cause of anæmia, whereas in other cases a correct diagnosis cannot possibly be arrived at until the blood has been carefully and systematically examined.

The history of the condition is of the greatest importance in the diagnosis of those forms of secondary anæmia which are due to a direct loss of blood. In the case I have just related to you there has been no hæmorrhage of any kind, there was nothing suggestive of a primary blood disease, of any parasitic diseases, or of any toxic conditions. The vomiting and pain and wasting were suggestive of malignant disease of the stomach, but it was impossible to arrive at a diagnosis from the history alone.

The result of the careful physical examination did not bear out the view of malignant disease. The liver spleen and kidneys were not palpable. There was a little fulness in the epigastric region which suggested some dilatation of the stomach, but there was no tumour pointing to carcinoma of the pylorus, nor was there evidence of any other form of pyloric obstruction. The examination of the heart revealed the presence of a basal and a mitral bruit, and these bruits in association with the pyrexia and the anæmia were suggestive of infective endocarditis although there was no sign of embolism. There was no sign of any pulmonary trouble and the urine was healthy, so that phthisis and Bright's disease were excluded. There were no glandular enlargements. The result of the physical examination, therefore, was not in favour of malignant disease, but suggested the possibility of infective endocarditis; it was, thus impossible, even after the physical examination, to arrive at any justifiable conclusion as to the cause of the very marked anæmia.

The result of the blood examination, however, made the diagnosis quite evident, for the changes found were characteristic of pernicious anæmia. In the light of recent investigations on the nature of this disease, it is a question whether it should be classed under the heading primary or idiopathic. Hunter looks upon pernicious anæmia as a disease of septic origin. He states that it is the result of a special infection of the digestive tract, especially of the mucosa of the stomach, and that the mouth and intestine are also frequently affected. He considers that oral sepsis, resulting from cario-necrotic conditions of the teeth, plays an important rôle in its production. One important element of the infection he believes to be streptococcal, but he does not consider it to be entirely streptococcal. It is of interest to note that with other organisms, streptococci were found in the cultures taken from the pus which welled out from around the teeth of the case I have under consideration. The mouths of patients suffering from pernicious anæmia do not always show septic changes. Dr. Pitt has resently had under his care a patient suffering from pernicious anæmia, and Mr. Maggs who was asked to see the patient remarked that the condition of the mouth and teeth was exceptionally good for a hospital patient. Hunter looks upon vomiting, retching and diarrhœa as local manifestations of the infection. The pyrexia he also interprets as a result of the infective process.

The blood is pale and watery in character, and in extreme conditions it may even be yellowish in colour. It coagulates very slowly and as a rule there is very little, if any, rouleaux formation. The decrease in the number of red blood corpuscles is remarkable, in fact more excessive than in any other known condition. In fifty-two cases examined by Cabot the average was 1,200,000 to the cubic millimetre. The lowest count on record is by Quincke, who records a case in which there were only 143,000 to the cubic millimetre. In the case I have read to

you the number was 650,000, which is very low. The form and size of the red blood corpuscles are extremely variable and this is at once seen if a film is examined microscopically, for you would at once be struck with the want of uniformity in the size of these corpuscles. A large number of macrocytes and microcytes may be seen, the former usually in excess of the latter, but seldom constituting more than 12 per cent. of the red corpuscles. The average diameter of a normal red blood corpuscle is 7·5 μ. The macrocytes may measure as much as 20 μ, their average size is 10 μ, microcytes may measure 5 μ or even less. In addition to the alteration in size, there is usually marked poikilocytosis or alteration in the shape of the corpuscles, pear, battledore, sausage and horse-shoe shape forms being visible. In a large number of cases nucleated red blood corpuscles are found, and they also vary in number and in size and form. Three varieties are described and they are termed normo-blasts, megalo-blasts and micro-blasts.

The normoblasts are of the size of the normal non-nucleated red corpuscles. They usually contain one nucleus but may possess occasionally from two to four. The nucleus stains deeply with nuclear stains and occupies the greater part of the corpuscle. The nucleus stains much deeper than the nuclei of the white corpuscles. Free nuclei may be recognised in the films by their remarkable affinity for nuclear stains. The protoplasm of the normoblast usually presents a pure hæmoglobin colour. The megaloblasts are much larger and are from two to four times the size of normal red blood discs. Their protoplasm is usually lighter in colour. The nuclei are larger than the normoblast nuclei but do not stain so deeply. Very large megaloblasts are called gigantoblasts. Microblasts are not usually present in the disease, they may be found in cases of anæmia due to severe hæmorrhage. It is of importance to note which form predominates, for an excess of megaloblasts over normoblasts indicates a bad prognosis. The number of nucleated red blood corpuscles vary to a marked degree. In Cabot's series of cases the range of variation was from 6 per cubic millimetre to 7,100 per cubic millimetre. In this disease another change may be seen in the red corpuscles, and that is polychromatophil degeneration, *e.g.*, instead of staining red with eosin and hæmatoxylin, the protoplasm is coloured violet, bluish red or even blue. The protoplasm of the nucleated red, especially the megaloblasts, often show this change. This change in the appearance of the staining indicates a degenerative process. Ehrlich states that megaloblasts are never found in traumatic anæmias. They are sometimes found in leuchæmia but hardly ever, if ever, even in the severest form of secondary anæmia. They are extremely characteristic of pernicious anæmia, and their presence in a severe anæmia has a most important diagnostic significance. In the investigation of a severe case of anæmia they must be most carefully searched for. Normoblasts have not the same significance for they are found in almost all forms of severe anæmia.

The hæmoglobin is usually much reduced in amount, but not as a rule in the same proportion or to the same extent as the red corpuscles. The colour index for each red corpuscle or the relative value of each red corpuscle for hæmoglobin is usually in excess of normal. Cabot found the average colour index for 39 cases to be 1·04. Hayem's cases varied from ·88 to 1·7, the normal in each case being one. Cabot found in his cases that the average percentage of hæmoglobin was 26 and the average percentage of red corpuscles 24. In the case before us the colour index was exceptionally high, being two (hæmoglobin 26 per cent., red blood corpuscles 13 per cent.)

The specific gravity is lower than normal.

The blood plates are stated by some observers to be diminished, by others to be increased.

The white blood corpuscles are, as a rule, not increased in number. In Cabot's cases the number averaged 4,200 per cubic millimetre. The lymphocytes were increased averaging 45·9 per cent. The eosinophiles are occasionally slightly increased. In the case I have related to you the lymphocytes comprised 39 per cent. of the leucocytes, a percentage considerably higher than normal.

(*To be continued*).

In the Out-Patient Department.

CASE UNDER MR. SYMONDS.

A middle-aged man of healthy appearance presented himself for advice and treatment. He said that he had fallen on his right elbow twelve weeks before admission as an out-patient.

The right elbow was considerably swollen, but neither painful nor tender; the swelling being due to effusion into the right elbow-joint. The usual movements of the elbow were deficient in extent. There was, however, some lateral movement to be made out just above the olecranon of the right side, and on the posterior aspect of the arm there could be felt a small superficial hard and freely movable mass. On moving this mass about crepitus was elicited. There was paralysis of the muscles supplied by the right musculospiral nerve. The ends of the bones entering into the formation of the left elbow-joint were enlarged and irregular. A similar condition was met with in the right knee, which seemed to be weak as the patient used an apparatus as a support to the knee. The pupils reacted to accommodation but not to light. The knee-jerks were absent.

Locomotor ataxy and Charcot's disease were diagnosed, the former because of the absence of eye and knee reflexes, the latter because a rapid, painless effusion had taken place in the elbow of a tabetic subject. Injury to the bone producing fracture was excluded, because the crepitating fragment was superficial and freely movable. It was pointed out that fractured portions of bone are, at any rate, not freely movable after a lapse of twelve weeks from the receipt of injury. The injury was, however, held responsible to a great extent for the lesion in the musculospiral nerve. This crepitating fragment was considered to be a synovial osteophyte.

This case is interesting in that (1) three joints were affected by the disease, (2) although movement in some directions may be increased, yet in other directions it may be diminished.

Case for Diagnosis.

C. K., æt. 55, was admitted into John ward under the care of Dr. Bryant, on April 25th, for "difficulty in breathing." Patient had had "painter's colic" in 1875 and 1894, also "sunstroke" in 1895, and on one occasion previous to this. Besides his work as painter patient had been a great pedestrian. He has suffered more or less from swelling of the legs for the last three years which was said to be due to varicose veins. This condition prevented patient working regularly in the summer of 1900, and in the winter of 1900–1901. He was in the Infirmary for six months with chronic bronchitis. He left there on April 12th, and when at home he became ill again. When admitted on the 25th patient had great difficulty in breathing, but was not cyanosed. The chest was of the emphysematous type and hyper-resonant all over; sonorous rhonchi were heard everywhere on both sides of the chest, and mucous râles at both bases. The sputum consisted of tough plugs. Pulse 110, temperature 97·4°, respiration 48. The heart sounds could not be heard. The pulse was hard. There was some œdema of both legs, and a large ulcer (apparently varicose) on the right. The urine contained 0·75 parts of albumen, and a few casts. Patient became very dyspnœic and drowsy in the evening, so venesection was performed; eleven ounces of blood removed. Patient improved greatly, but the following evening he became worse again and venesection and subsequent infusion were resorted to. Patient kept comparatively well, with but little difficulty in breathing now. On May 2nd, and afterwards, no albumen or casts were found in the urine. On the 6th, the dyspnœa increased steadily through the day, venesection and intravenous injection of saline fluid were resorted to, but patient died at 4.45 a.m. on the 7th. The bronchitis and œdema remained until death.

At the autopsy.—Old pleural adhesions were found on the surface of the lungs, which were œdematous. There was a large amount of muco-pus in the bronchi. The heart was very large, both sides being dilated. No valvular lesions were present. The cardiac muscle was streaky, apparently with fatty degeneration. There was extreme atheromatous change in the first three inches of the aorta, and a fusiform aneurysm of the same. The rest of the aorta was good. Weight of heart 801 grammes. Liver: "Nutmeg" in character with some perihepatitis. Spleen: "Cardiac" in type. Kidneys healthy.

A Case of Endocarditis.

THE following case seems to me worth recording as an example of marked mitral endocarditis *apparently* completely clearing up.

On November 13th, 1900, Thomas M., æt. 43, with no history of any serious illness or of rheumatic manifestations, consulted me on account of pain and swelling of the left knee-joint. There was fluid in this joint, which was very tender; there was slight swelling of both elbows, and "stiffness" of the metacarpo-phalangeal joints of both hands; he was perspiring freely, and the temperature was 101°. It was clearly a case of rheumatism.

Under salicylates the symptoms subsided in a few days, but he had several relapses which followed almost immediately any reduction in the dose (gr. xx. 4tis horis) of Sodium Salicylate. Altogether he was confined to his bed for ten weeks, and for another ten days was kept within doors.

At the commencement of the illness I carefully examined the heart, which was perfectly normal in every respect; a fortnight later, November 28th, was heard a faint systolic murmur strictly localised to the apex, which was in the normal situation. This bruit gradually increased in intensity, and changed in character, at the

same time the apex beat became displaced gradually outwards until on December 24th, the condition of the heart was as follows:—

There was no increase of cardiac dulness to the right or upwards, but the apex beat could be felt one inch outside the nipple line and was diffused being also palpable half an inch inside the nipple line. There was a loud sawing systolic murmur following the first sound. This bruit could be heard all over the precordial area, could be traced into the axilla, and was distinctly audible at the angle of the left scapula. On January 28th, the condition was precisely the same except that the apex beat was less diffused and could not be felt to the left of the nipple line.

On this date he left home and went to Bath where he stayed for three weeks. Soon after his return, on February 27th, I again examined the heart. There was no bruit, the apex beat was in the normal situation and the cardiac sounds were perfectly normal.

I am a little puzzled to decide in my own mind what is the condition of the heart. I had confidently come to the conclusion that the mitral valve was permanently damaged; does the disappearance of the bruit militate against that view, or will he subsequently develope mischief due to shrinkage of the valves?

I should be grateful to any reader of the GUY'S HOSPITAL GAZETTE, if he could give me any hints as to the prognosis.

Margate, CHARLES J. HARNETT.
May 22nd, 1901.

Revised Syllabus for L.D.S. Examination.

BY R. P. ROWLANDS.

ANATOMY.

All cranial bones, fossæ, and air sinuses.

Cervical vertebræ.

All cranial nerves, especially third, fifth, seventh, ninth, eleventh, twelfth.

Cervical and brachial plexuses. Post-cervical nerves.

All muscles of head and neck.

All joints of head and neck and sterno-clavicular joint.

All arteries and veins of head and neck.

All triangles of head and neck, and deep cervical fascia.

Trachea, œsophagus, pharynx, larynx (elementary), tongue, tonsil, soft palate, thyroid body, salivary glands.

Brain (elementary), membranes of brain, and sinuses of dura mater, circle of Willis.

Middle ear.

Hyoid bone, clavicle, sternum, scapula, first and second ribs.

Main points about humerus, radius, ulna, femur, tibia, fibula, pelvis, os calcis, astragalus, vertebræ, ribs.

Heart.—Great vessels.

Arteries, tendons and nerves of forearm.

PHYSIOLOGY.

Foodstuffs.—Nature of proteids and gelatin, fats, carbohydrates, salts, and water. Digestion and absorption of these. *Composition of* milk, meat, bread, butter, potatoes, soup, beef-tea.

Salivary glands.—Structure at rest and in activity, nerves, composition and uses of saliva, ferments organised and unorganised. Mastication and deglutition.

Stomach.—Structure. gastric juice and its uses, vomiting. Pancreas: structure, secretion and its uses.

Liver.—Structure of lobule, circulation, bile.ducts, gall-bladder. Glisson's capsule. Bile and its uses. Glycogen.

Intestines.—Structure, valvulæ conniventes, structure of villus; secretion actions; peristalsis, colic, diarrhœa; naked-eye appearances of different parts; course of food from mouth to anus.

Absorption of food and course into the blood of each variety; defæcation.

Lymph and chyle.—Receptaculum chyli, lacteals, thoracic duct.

Respiration—internal and external.—Structure of lungs and trachea, pleura; movements of chest and how produced; nerves and nerve centres of respiration; changes in larynx during breathing; cough; capacity of lungs, tidal air, etc., dyspnœa, apnœa; differences between inspired and expired air, and between arterial and venous blood; diffusion of CO_2 and O_2, condition in the blood. Ventilation; structure and uses of nasal mucous membrane.

Circulation—Blood.—Constituents, corpuscles, plasma, coagulation; structure of heart and blood-vessels; actions of heart, cardiac cycle, peripheral resistance, blood-pressure, velocity of blood; pulse, pulse tracing, velocity, rate; bleeding from vein, artery and capillary; nerves and nerve centres for heart and vessels. Aids to circulation (1) respiratory movements, (2) valves, (3) contraction of muscles.

Nervous system.—Structure of nerve cells and nerve fibres, reflex arc, reflex action, examples; structure of white and grey matter (of brain and cord); paths of sensory and motor impulses.

Excretion by kidneys.—Structure, urine composition, urea, micturition.

Excretion by skin.—Structure, sweat, uses.

Excretion by lungs, intestines, etc.

Body heat.—Production, loss, regulation, warm and cold blooded animals, temperature.

Muscles.—Structure, uses as producers of movement and heat; phenomena of contraction.

Special Senses.—Brief account of the mechanism of each special sense.

SURGERY.

Inflammation.—Phenomena, results; acute abscess, its wall, pus, ulceration, cellulitis, sloughing, gangrene, necrosis, boils, carbuncles, styes, sinus, fistula; general characters of fever.

Wounds.—Kinds, wound infection micro-organisms and their action; sapræmia, septicæmia, pyæmia, erysipelas, tetanus, aseptic treatment of wounds.

Repair.—Various methods.

Hæmorrhage.—(1) Primary kinds, natural arrest, and repair of vessel; artificial arrest; arrest of bleeding from mouth, tongue, tonsil, lip, tooth-socket, nose and varicose veins; (2) Reactionary; (3) Secondary, causes, treatment, effects of hæmorrhage, treatment of anæmia; hæmophilia and other bleeding diseases.

Syphilis acquired and congenital (thoroughly).

Aneurysm and cirsoid aneurysm.

Tumours.—(*a*) Innocent; (*b*) Malignant; i. Connective tissue; ii. Epithelial; Especially—Epithelioma, carcinoma, sarcoma, rodent ulcer, fibroma, myxoma, osteoma, wart, and nævus. *Cysts*—Hydrocele, sebacceous, and dermoid.

Diseases of the Tongue.—Wounds, acute glossitis, chronic superficial glossitis, thrush; *Ulcers* of tongue and mouth; simple, mercurial, tubercular, syphilitic, malignant; Tumours– Excision of tongue.

Disease of the Salivary Glands.—Ranula, salivary calculus and fistula; mumps; tumours.

Ganglion, eczema, ringworm, scabies, psoriasis, impetigo, cystitis, chilblains, lupus.

Diseases of bone,—Periostitis, osteitis, necrosis, acute infective necrosis, or osteomyelitis, caries, osteomalacia oteitis deformans, rickets, growths, osteoma, exostoses (ivory and cancellous), sarcoma (central and peripheral), odontomata, excision of jaws.

Syncope and shock.

Concussion and compression of brain, meningeal hæmorrhage, fractured base.

Fractures.—Signs, treatment, process of healing, treatment of fractures of jaws, dislocation of lower jaw.

Anæsthetics.—Choice, risks, foreign bodies in air passages, laryngotomy, tracheotomy, cut throat.

Cleft palate and hare-lip.

Diseases of lymphatic glands, septic, tubercular, and malignant, and Hodgkin's disease.

Adenoids, nasal and nasopharyngeal polypi.

Diseases of the maxillary antrum.

Tonsillitis, diphtheria, retro-pharyngeal abscess, alveolar abscess, fixation of lower jaw (causes and treatment).

Diseases of joints.

Otitis media and its complications.

Ophthalmia. Keratitis.

Epulides.

Results of section of a nerve trunk,

NOTICE TO CORRESPONDENTS.

The Editor wishes it to be understood that no communications can be inserted which are not guaranteed by the name of the sender. All articles must be written on one side of the paper only.

Pass List.

University of Cambridge, April, 1901.

THIRD EXAMINATION FOR THE MEDICAL AND SURGICAL DEGREES.

Part I.—E. I. Claxton, G. S. Graham-Smith, E. F. G. T. Heap, H. Wacher.

Part II.—J. M. Brydone, C. H. Glenn, J. Alison Glover, M. C. Hayward, R. D. Smedley, N. F. Ticehurst.

University of London, May, 1901.

M.B. EXAMINATION.

First Division.—G. Clarke, T. H. B. Dobson, D. G. Greenfield, J. A. B. Hammond.

Second Division.—G. T. Collins, H. B. Foster, E. T. Jensen.

Royal College of Surgeons of England. May, 1901.

PRIMARY FELLOWSHIP EXAMINATION.

The unofficial list printed in the Gazette for May 25th has now been officially confirmed.

University of Durham, April, 1901.

Examination for the Degree of Doctor in Medicine.—H. W. Dudgeon, T. J. A. Tulk-Hart.

(For Practitioners of Fifteen Years' Standing.)

Examination for the Degree of Doctor in Medicine.—E. H. Graham.

Royal College of Surgeons, Edinburgh.

Examination for the Diploma of Fellow.—A. Kinsey-Morgan.

Nursing News.

Matron's Office.

On May 22nd, Nurse Swadling, Head Nurse in Job ward, left the hospital on completion of her three years' training, and Probationer Lindon was appointed to succeed her as Head Nurse.

On May 28th, Nurse Warren left the hospital on completion of her three years' training, and Probationer Howlett was appointed to succeed her as Head Nurse in Miriam ward.

Miss Bessie Baker, late Head Nurse in Bright ward, who completed her three years' training in May last, has been appointed Sister of the Women's Medical Ward at St. Giles' Infirmary, Camberwell.

Our Latest Possessions.

Annexation Cruise of H.M.S. "Mildura," in the Pacific Ocean. By Surgeon PERCIVAL M. MAY, R.N.

(Concluded.)

Penrhyn and its neighbouring islets do not present a particularly fertile aspect when viewed from the sea, cocoanuts being about all that grow there. The population is about 450, it is gradually decreasing, the decrease in the old time being due to slavers taking away the population, but latterly to natives hiring themselves out to work at other places. It is one of the most famous islands in the Pacific for the pearl oyster, hundreds of tons of shells being exported in the year. Lately this has been in the hands of French traders who have worked it for all they know; they only give a fifth of what they get for the shell in the home markets.

The pearl oyster is an inhabitant of the interior lagoons of certain of the great coral atolls. The one necessity for its existence appears to be clean growing coral to which to attach itself, free from sand, and a considerable rise and fall of the tide. They are also to be found on the outer reefs. They come to maturity in from six to seven years. Spawned in the depths of the ocean, and in the coral caves, they make their way through the foaming surf into the lagoons. When fully grown the shell weighs about a pound, and their average size is from nine to twelve inches in diameter. After this the fish dies, and the shell opens. Gregarious in its habits, it is not a fixture, and exists in chains. Its colour during life is iridescent, varying from a dark green to a golden bronze. It is fixed firmly to the rocks, and when it moves it does so very slowly.

Mr. Sterndale, who has written a great deal on the Pacific Islands, where he spent many years, writes in a very fascinating and poetical way about the pearl oyster. "There the pearl oyster adheres to the side of some caverned cliff, covered with marine vegetation, and spreading out his ample beard (of which the dazzling colours, when viewed in the light of the refracted sunshine beaming through the liquid element in which he dwells, are like the tints of the opal, or of that stone which is called cat's-eye by the merchants of Ceylon), and sweeping round his snaky tongue he feeds daintily, and waxes fat, and devotes the surplus of his nacreous secretion to the production of a precious gem, such as might haply be counted amongst the chief treasures of a kingdom." The production of a pearl is not really a normal sequence of events, but really a disease, so that if we find a clean smooth shell there will be no pearls, but if the shell be warty and honeycombed there may be many.

The pearl oyster is provided with a secretion, which lines the shell and gives to the rough material of which the shell is formed a beautifully smooth surface well adapted to prevent any friction on the tender body of the animal. This secretion is laid on in extremely thin semi-transparent films, which causes the iridescence. This, when hard, is known as Mother of Pearl. Sometimes detached, oval and rounded portions of this material may be found on opening the shell, and these are known as pearls, how they are formed does not seem to be exactly known, but they are said to be caused by the intrusion of some foreign body, such as a grain of sand which so irritates the animal that it covers this foreign body with the nacreous secretion, and so the pearl is formed, successive layers having been deposited.

The native divers swim down head first to obtain these shells, and their stay below varies from one to three minutes. Twenty fathoms is the greatest depth they go down. The size of record shells is eighteen inches to one yard across. Several of the boats at Penryhn are provided with diving gear and dress for diving for the pearl oyster. These boats are splendid, exhibiting excellent sailing qualities. The timber is imported and the natives build them on the island; they are fast and carry no end of a lot of canvas, while the natives are excellent boat-sailors.

From Penrhyn I sailed in one of these boats to Molokai, which is an outlying island (part of the Penrhyn atoll) across the lagoon about two and a half miles. This island is noted as being one of the leper islands of the Pacific, and the purpose of my visit to it, at the wish of His Excellency the Earl of Ranfurly, was to see under what conditions these poor people existed, and whether anything could be done to better their condition.

The island itself looked a beautiful place enough, and one could hardly imagine that in such a climate and under those waving palm trees such a foul disease could exist; nevertheless it was there, and in some of its worst forms. There was little sign of life about the island as we landed, but on making a closer examination the unfortunate people were found sitting or lying in their huts, which were found dotted along the side of the lagoon. I was accompanied by a somewhat indifferent interpreter, so that it was often very difficult to obtain the information needed.

The first five cases showed only too plainly the ravages of the disease, being typical examples of nodular leprosy.

The first case seen was that of a male, aged about nineteen. He had been ill a year. There had been no other case of leprosy in the family, and I could get no history of any contact. The disease started with fever and sweating, he afterwards developed weakness and loss of flesh. This was followed at a later date by an exanthem of macular spots, but the only one to be seen at the time of examination was a vitiliginous spot about three inches in length, and situated on the arm, which it nearly encircled. He had had other spots on his body, but these had all disappeared, His limbs were atrophied. The most characteristic point present in his case was the deformity of the hands and feet. Both hands presented the characteristic "main en griffe" appearance, this was accompanied by anæsthesia and atrophy of the muscles. Parts of the fingers were wanting and some of the nails had been shed. The right foot was affected,

talipes equino varus being present. There was some eversion of the lower lids of both eyes. When asked of what he complained most of he informed me "shooting pains."

The second case was that of a female, aged about forty-five years. When asked whether there was any history of contact she said she did not know of any, but attributed all her trouble to a fall. She had been on the island for three years, and was fairly well nourished. There was thickening of the folds of skin about the forehead and cheeks. Both lower eyelids were drawn down and everted, but I did not notice any corneal ulceration, although both conjunctivæ were much inflamed, and lachrymation was present.

The third case was in the person of a young girl aged about fourteen; she had suffered from the disease for one year and four months. The skin of the eyebrows and forehead was thrown into deep folds, and very much thickened. The lips were swollen and ulcerated, the nose was very much broadened out and ulcerated, its tip having gone. Her ears were thickened and pendulous, and the whole face presented the appearance known as *Leontiasis*. The patient was unable to articulate, owing perhaps to the existing ulceration and probable anæsthesia, so that it was most likely that the sense of smell and taste had also gone. The eyes had been attacked by the lepromatous growth and the patient was quite blind. Macules in vitiliginous patches were present on the backs of the hands and on the legs. The fingers were thickened and ulcerated in places, and the toes were also greatly thickened.

The fourth and fifth cases were not so much advanced as the third, one was a man aged twenty-three, and the other a girl aged about ten; these last three cases belonged to one family, being a brother and two sisters. They also presented in a lesser degree the leontiasis appearance, the lips being much thickened, cheeks thrown into folds, eyelids drawn down and exposing the conjunctivæ in the young child's case, and causing ulceration of the cornea in one eye; the other eye, however, was not yet affected. Nodules were present on the wrist in both cases. In the man's case the ears were tremendously thickened, the length from the highest point of the helix to the lobule being four and a half inches. On making enquiries as to what symptoms came on first, the man, who was fairly intelligent, said sleepiness and sweating, then the spots, and afterwards the nodules appeared. He had been on the island for two years and four months.

The aforementioned cases were all situated at one end of the village. The remainder that I saw were at the other end, where some half dozen native houses were situated. Here we found nine or ten natives, all women. Four of these were said to be lepers. They were all very disinclined to submit to any inspection, and I was only able to make a very cursory examination. Their stay in the island had not been long and they were not at all of an advanced type. In at least two cases the diagnosis was very uncertain, but the time and means at my disposal did not enable me to make the minute examination necessary for an absolute diagnosis. Besides these there were six women who were not lepers, in attendance on those afflicted with the disease.

The following is a short history of leprosy in the Penrhyn Atoll. The disease was apparently introduced by a native of Samoa, one Tarpena by name, in 1883; there is also a record of a leper coming from Honolulu, one Oranga, at about the same period. Owing, perhaps, to the partial segregation practised, the disease does not seem to have made very great strides, although the percentage out of a population of 450 is nearly as large as in the Sandwich Islands, namely, two per cent. As far as I could ascertain the disease has not increased of late years.

The longest period that a leper had been at Molokai was three years, and the shortest one year. There have been about twenty deaths, thus a total of twenty-nine cases have occurred during a period of seventeen years. The people were keen on gaining information for the prevention of the spread of the disease, and also as to how it may be recognised. Owing to the short time at my disposal, it was not possible to make a close examination of all the cases. Of course the well-marked cases needed no further diagnostic evidence, but there were two or three cases which would need careful microscopic evidence before an exact diagnosis could be made. At present the method seems to be that if any suspicious skin eruption appears on any inhabitant of Penryhn Island he is at once taken off to the Leper Island of Molokai, where if he has not leprosy then he stands a great chance of getting it in the future.

The following suggestions appeared to me worthy of consideration in the event of an effort being made to stamp out this disease:—

1. That a Government medical officer be appointed and that he should visit the island once in three months or oftener if necessary. He could then see all the "suspects" and decide whether they are or are not suffering from leprosy. He could also report on the general health of the people and give any directions necessary for the treatment of the sick.

2. Instead of a supposed leper being at once deported to the leper island, he or she should be isolated in some other part as a "suspect," until the medical officer confirm or disprove the diagnosis.

3. That an intelligent native who is willing to look after the sick on the leper island should be given instructions such as would enable him to administer drugs and apply dressings to the ulcers and wounds of the lepers.

4. That the following remarks as to the prevention of leprosy be translated into the native language and distributed amongst the inhabitants, so that they may know what leprosy really is, and how it may be stamped out from their midst:—

i. Leprosy is caused by a germ and is contagious through contact, either directly or indirectly with a leper. Therefore the leper is a source of danger to

the community he may live amongst. All lepers should accordingly be isolated most rigorously and kept away from the healthy inhabitants. And when found in villages their clothes, etc., should be destroyed and not left about to spread infection.

ii. Lepers should be very cleanly in their persons and houses.

iii. They should not be allowed—

a. To beg in the villages.

b. To keep shops.

c. To handle food or clothes, etc., intended for others.

d. To go out as servants or to frequent public places.

iv. A child born of leper parents should be at once removed from them.

v. All intercourse between the healthy inhabitants of Penrhyn Island and Molokai should be restricted as much as possible. No cohabitation should be allowed.

vi. No leper should be allowed to leave the island of Molokai on any pretext whatever. When they die all their clothing should be burnt.

Shortly afterwards we left for Manihiki, where we arrived October 16th (Eastern time). This is a lagoon island, the lagoon being about six miles in diameter and containing a vast deposit of pearl shell. The natives are a good looking race, especially the women; they are Christians and dress in a semi European fashion. Population is about five hundred. The island was discovered in about 1872, by Patrickson, and is crowded with cocoanut groves. Here the people did not wish for annexation, preferring to remain under the Protectorate.

On October 19th, we landed at Niné, or Savage Island. This island was so named by Captain Cook when he discovered it; from the fierceness with which the natives attacked him. It is about thirty-six miles in circumference, and two hundred feet in height, and it consists of upheaved coral with a fringing reef, a deep natural channel running up close to the shore, with a small wooden jetty built out. This channel was about ten yards in width, and up this the incoming waves used to surge, as well as dashing upon the adjoining fringing reef; then, as the breakers receded, the sea poured off the reef like a miniature Niagara into the channel, and woebetide the unfortunate boat that did not keep a straight course in the middle of the channel, for it stood a great chance of being swamped by the waves pouring off from the reef, and we all had to be very smart in jumping from the boat on to the jetty.

The channel being so narrow in shore, the captain was asked whether anything could be done to widen it by blowing up part of the reef bordering the narrowest portion. This was thought feasible, and was carried out most successfully by Mr. Ferris, the Gunner of the Ship. A piece of rope, fifteen fathoms long, was rove through two sixteen and a quarter pound canisters of wet gun-cotton, the tins being about three feet apart; two and a quarter pounds of dry gun-cotton were used as primers. These two charges were placed underneath the projecting piece of reef, which had to be dislodged, and secured in close contact with it by means of the rounding rope. The charges were in fork, but the detonators in series. A ten-celled battery was used at one thousand yards. An earth circuit was employed and the charge exploded. There was a dull rumble, a muffled roar, then a seething hiss, as the fragments of rock, bursting in twain and upheaved into the air created a mighty chasm. The waters were thrown back by the force of the concussion, then gathering themselves together they rushed forward with a swirl to fill the cavity left, and as they settled down, we saw that the channel had doubled its width, and even part of the opposite side had been uprooted by the explosion. Numerous large black fish were floating dead in the water, and the natives, who had watched the proceedings with great interest plunged in with many cries and seized them. This island was also annexed with the usual ceremonies and salutes.

Our next stopping place was Nukualofa, the principal town in Tongatabu, on the northern side, this being the chief island of the Friendly Group. Here reside King George, his government officials, and the British Vice Consul. The government, which is native, is supposed to be enlightened, liberal and respectable! At the present time it is fairly corrupt and rotten, and the sooner annexation is performed the better it will be for everyone. The main industry is the manufacture of native clothing from the bark of the tappa tree.

We had an exciting cricket match with the Wesley native mission college, losing by one run. The natives are excellent bowlers and fielders, rarely letting anything go by, and many of them are good with the bat.

We left the Friendly Islands on October 24th for Lyttelton, Christchurch, New Zealand, and a gradually falling temperature made things much more bearable, so that the cabins down below once again became habitable. On October 26th we arrived at Sunday Island, which is on the direct route between New Zealand and the Friendly Islands and about half way; this island is also known as Raoul Island, and belongs to a group known as the Kermadecs, the two others being Curtis Island and Macaulay Island. They are all volcanic.

Sunday Island is about twelve miles in circumference, and its highest point is one thousand six hundred feet. Landing is difficult at all points, owing to the heavy surf, and also to the boulders and rocks lining the shore at many different parts. However, after a little trouble and a bit of a wetting we got ashore, and proceeded as far as time would allow us to explore the island. After toiling over huge boulders beneath the lofty cliffs for about three-quarters of a mile, we came to a sandy beach, the sand being very nearly black. Here the cliffs ended, and three of us proceeded to toil up the hill to the top. The soil seemed to be very rich, composed as it was of volcanic ashes and vegetable mould, covered by long luxuriant grass and ferns and abundantly wooded in parts. One of the great features of this group of islands was the myriads of sea birds which inhabited them,

hundreds of them flying round in all directions, making the air ring with their mew-like cries. Amongst them one noticed different kinds of petrels, shearwaters for instance, and dove petrels, tropic birds, etc. Some of these we caught sitting on their nests, and on the ground in various parts, some being quite young birds; they were very vicious when handled, pecking away with their sharp beaks, and obliging one to be very careful. We caught two and put them in an empty camera case, they cried exactly like two naughty babes, it was most ludicrous, and we roared with laughter. Our climb was amply rewarded by the view from the top of the hill. Looking down on the other side through the trees, we saw, occupying the old crater, a lovely shimmering lake, about four or five miles in extent, and on our right at a higher level was a smaller lake. The other side of the hill leading down to the lake was almost too precipitous to be descended, although we should have liked to have explored and found out all about it, had time permitted. The island is only inhabited by one family of Europeans.

On our way off to the ship a small adventure took place which proved slightly exciting at the time. The captain's galley came in for him, Lord Ranfurly and his Secretary, to a sandy bay on which a slight surf was breaking; they all waded out and got into the boat, which had come in stern first. Before any way could be got on, a big roller suddenly came in, threw the boat broadside on, filling her partly with water, and this wave was succeeded by another larger one almost immediately which filled the boat and nearly capsized her. Three of us who were on the beach waiting for another boat, now went to the assistance of all the others who were endeavouring to bale the boat out, and get her in shore, and the waves, which previously had been quite small, made up their minds to have some fun with us, and came rolling in, knocking men, boat, oars in all directions, and I may say a big boat full of water is no light weight. Everyone was overboard, governor, captain and all, and slowly we got the boat close in; bluejackets stripped and swam after the oars that were in danger of being lost, and one swam out to the other boat which was waiting outside the breakers with a line, which unfortunately proved too short. I had been congratulating myself that I hadn't been quite under when a big wave came, knocking me away from my grasp, and over into the surf, from which I emerged feeling rather cross at my most unceremonious ducking. Finally, after many struggles, our united efforts got the boat broadside on the beach (we had taken all the gear out of her by this time), bailing hard, all the water was got rid of. Gear was then replaced and a fresh start made. A longer towing rope had been sent off from the ship by another boat, and this was made fast to the galley. Wading out amongst the breakers, we re-launched the boat, this time being successful, the men rowing hard, and the other boat outside the breakers towing. Shortly after all reached the ship. Very little damage was done, except that one or two watches and a camera were slightly damaged by the sea water, and no one was any the worse for their impromtu bath. We weighed anchor shortly after homeward bound.

At Curtis Island we were able to effect a landing without any difficulty at a small cove on the north-west side. Here was indeed a weird scene. A strong smell of sulphur pervaded the air. Steam arising in many directions from the surrounding cliffs and the level ground. We were inside the crater of a more or less active volcano. In two or three places one heard deep rumblings as if (as indeed was the case) a mighty cauldron was on the boil, and on approaching cautiously, one could see black mud and water bubbling up furiously, and spouting up occasionly like a fountain. The ground was crumbly, and caution was needed in walking about; small jets of steam seemed to come out of the earth in all directions, and a hot river of black mud and water ran down into the sea, which was positively hot close in shore. The only inhabitants were myriads of sea birds, who flocked round us in thousands, uttering their shrill cries, and so tame, that they would settle on a rock within a yard of you. The surrounding cliffs were lofty and covered with grass on the top. The only other kind of vegetation was a succulent creeping plant, which did not seem to mind either the heat from the steam or the sulphur. This is one of the islands where a provision depôt for shipwrecked sailors is kept up; it would indeed be a terrible fate to be wrecked on such an island, even if only for a short time.

Shortly after we arrived at Port Lyttelton, Christchurch, where His Excellency, Lord Ranfurly disembarked. We had accomplished our task in the short time allotted to us, having traversed over five thousand five hundred miles, since leaving Wellington, visited and annexed many islands, carrying out on some of them important surveys, making arrangements for increasing trade, etc., etc., all in the short space of thirty days. We had, moreover, brought back safely to his people the Governor, Lord Ranfurly, who had accomplished his task so successfully, and who left us amidst the regrets of all.

Papers by Guy's Men.

With Dr. Hale White in the Wards of Guy's Hospital.—*The Clinical Journal*, May 29th.

A Note on the Diagnostic Value of X-ray Photography in Osteo-Arthritis. By E. W. H. Shenton, M.R.C.S., L.R.C.P.—*Ibid.*

Four Clinical Lectures on Some Affections of the Kidney. By A. H. Tubby, M.S., F.R.C.S. Lecture I.—*Ibid.*

The Practice of Blood-letting. By J. F. Briscoe, M.R.C.S. (continued).—*Ibid.*

A Clinical Lecture on Movable Kidney. By W. Arbuthnot Lane, M.S.—*Ibid.*, 5th June.

A Case of Acute Glanders. By W. C. C. Pakes, D.P.H.—*Ibid.*

Passim.

THE exigencies of space alone prevented us from commenting in our last issue on the Annual Report of the Clubs' Union which we then published. The Report is of more than passing interest, for it affords evidence of the attention paid by the officers of the Union, and of the constituent institutions to the interests of the hospital. At the same time, a serious feature in it is the fact, that while the Clubs' Union is continually called upon to extend its sphere of action, with a consequent increase in its spending capacity, there is no corresponding increase in its receipts. This is due to no falling off in the membership roll, the reverse rather is the case, for this shows a steady, though small, increase in numbers. Nor is there any lack of economy displayed in the management of affairs, for we note that during the year the expenses were cut down to the extent of £36 3s. 10d., and the various grants have been reduced to the utmost possible limit.

WHY, then, has there been this steady diminution in income with the result that an actual loss of £37 was incurred on the year's working? The reason is not obvious; but, on careful examination, it would seem that during the early years of its history the income of the Union was inflated by the accession of old Guy's men to its ranks, who, on payment of a guinea subscription, became life members. The supply of such subscriptions is now well nigh exhausted, while the vast majority of Guy's men entering at the hospital since the inauguration of the Union have, as a matter of course, become life members during their period of studentship.

THE method of paying subscriptions has also altered, for, at the outset, men qualified as life members by paying annual subscriptions of £2 2s. for four or five years, according as they joined as third or first year students respectively. Nowadays, however, parents appreciate the economy of compounding for life membership by the payment of £8 8s. on the student's entrance at Guy's. For these reasons the income has shown a steady shrinkage, having apparently now reached its normal annual amount, for the entry of new students is fairly constant, and, though fluctuating slightly, has certainly shown no decided increase during the past five years. Expenses have, however, increased, for with a rapid growth in the value of the surrounding land, now devoted to "eligible bijou residences," has come a great rise in the rates and taxes to be paid. Each year, too, demands an increased outlay for wear and tear of buildings and appliances, which was not noticeable while our property was still new. This outlay has not been provided for by a sinking fund earmarked for that purpose, for we have unfortunately been compelled to live almost up to our income, any surplus having been devoted to the repayment of debentures.

THE Council call the attention of their successors to this condition of affairs and wisely suggest a consideration of possible means of increasing the income. Cannot this be effected by judiciously popularising the ground as a place of resort and so deriving some benefit from gate-money? As a cricket and football ground it is hard to beat, its dressing accommodation is much above the average, and owing to its accessible situation it should not be difficult to secure home matches with first-rate teams, which would attract a larger attendance of the paying public. If men object to this intrusion on their privacy they must be prepared to pay a slightly higher price for it. We trust the Council will find some way out of their difficulty and commend the matter to the attention of those budding financiers who have been gifted with a faculty for working out sums of the "profit and loss" order with a satisfactory result.

ANOTHER name has to be added to the roll of honour which will some day commemorate those sons of Guy's who have fallen during the present war in South Africa. Francis Wellford, Surgeon-Captain in the Imperial Yeomanry, is reported to have died of wounds received in action at Vlakfontein, on May 29th. Captain Wellford was, in his time, a man well known at

the hospital, both as a student and as house-surgeon to Mr. Lucas. We deeply deplore his loss, and beg to assure his friends of the sympathy of the present generation of his fellow Guy's men. We have communicated with one of his contemporaries, and hope to give a fuller notice of his career in our next issue.

OUR appeal for shade on behalf of the *habitués* of the Patience Balcony has met with a ready response. Not only did the House Committee at once interest itself in the matter, but Mrs. A. D. Fripp generously asked to be permitted to defray the whole cost herself. The work has already been taken in hand, and the balcony will soon be comfortably shaded by removable blinds and curtains, which in the heat of summer will, we feel sure, be much appreciated by the patients. We take this opportunity of conveying to Mrs. Fripp our thanks for her kind gift.

WE publish in this issue, as promised in our last, letters on the subject of the proposed wholesale distribution of the "M.D. Eng." We do not propose to throw open our somewhat restricted space to further discussion on this subject, especially as one letter which we had already sent to our publishers has since appeared in *The General Practitioner*. Its authors apparently doubted our assurance that it would be published as soon as possible, and seem to have imagined that its suppression was due to animus on our part against the engineers of the movement.

As a matter of fact we have a perfectly open mind on the subject. We sympathise with their complaint that an ignorant public imagines that the mystic letters M.D. indicate any marked professional superiority on the part of the signatories. What we did criticise was the method of their agitation. Do they imagine that because so many cheap M.D.'s are procurable they could rectify matters by swamping the market with another. They must remember that, even if the colleges had power to confer such a degree, which is not the case, it would necessarily have to be retrospective in character. We should advocate rather one standard final examination for medical men, as is the case in Germany. In the multiplicity of degrees there is much confusion and little dignity.

WE regret that we are unable to grasp many of the points of Mr. Elliot-Blake's letter on this subject. He apparently agrees with us that it is worth a man's while to take the present London University degree if possible. We fear we cannot wholly concur with him in his views on "research." Doubtless, a man who has taken no University course may be clinically superior to one who has done so. The more reputable M.D. degrees are simply certificates of a wider education in arts, science and medicine than is necessary for the Conjoint Board's examinations. Of the degrees which have been earned more easily, and do not require such a course of study, we say nothing. Personally, we doubt whether they are worth having.

THE value of so-called degrees and letters in the eyes of the public is extremely difficult to gauge. Even the educated classes have a vague idea of the relative standards of various diplomas, and the more ignorant may possibly be deluded by the strings of hieroglyphics with which certain persons adorn their names. We saw a marvellous advertisement lately which fascinated us by its grandeur; it ran as follows:—"— ——, F.S.M.C., 460A, Any Road, Qualified Oculist Optician (by examination). Consultations free. No fancy prices." What does F.S.M.C. mean? We imagine that as the advertiser's "fancy" was debarred from figures it strayed to letters.

WE are grateful to the Editor of *The General Practitioner* for his ready and generous appreciation of our slight attempt at humour in our late Passim note on this subject. Sacrifice of the midnight oil is so often unproductive of inspiration that unsolicited notice from such high quarters is most gratifying.

IT is with regret that we note the retirement of the Rev. W. H. Gregory from his duties as one of the Chaplains to the Hospital. He has

been with us for the last sixteen months, and many of us will be very sorry that he has gone, We understand that, up to the present, the name of his successor has not been submitted for appointment by the House Committee.

AT a meeting of the Presidents of the Pupils' Physical Society, held on Monday, the 3rd inst., the prize of £10 for the best paper read before the Society during the past session was awarded to Mr. F. Curtis for his "Notes from an Ornithological Cruise in the North Polar Sea," with which the season of 1900–1901 was inaugurated. The prizes for the best collection of exhibits and for ability shown in discussion were not awarded, owing to the equal merits of so many members, but a special prize of £5 was awarded instead to Mr. P. N. B. Odgers for his paper entitled, "Focal Epilepsy." We commend to the attention of junior members of the Society the desire expressed by the Presidents that the money devoted to the prizes for "exhibits" and "discussion" should, if possible, not be diverted from these special purposes.

MEETINGS of the Physiological Society were held on May 30th and June 7th, when papers were read by Messrs. A. M. Webber on "The Muscular and Nervous Mechanism of the Alimentary Canal," and M. de L. Robinson on "The Coagulation of Blood."

THE Guy's Hospital Colonial Club held their annual dinner at the Holborn Restaurant on Thursday evening, June 6th. Mr. Symonds presided, and a company of sixteen were present, including Dr. Mutch, an old Guy's man, coming originally from Canada. After dinner the Club went into committee and discussed the advisability of enlarging its sphere of action by inviting the co-operation of colonial students at other London hospitals. It was decided, however, to shelve the matter for the present in order to learn the views of many colonials who were unable to be present, as well as of those who are studying elsewhere in London. The toasts were few, but the oratory was of no mean order, and any lack of numbers was compensated for by the enthusiasm of those who were present.

THE May Pass List for the M.B. London was fairly satisfactory as regards numbers, and the proportion of Guy's men in the First Division was especially so. Of the candidates who were so placed a third were Guy's men. The Cambridge examination results published in this issue are also good, especially as regards the Third Examination for the medical and surgical degrees; of the six Guy's candidates for Part II. of this examination all were successful.

WE commend to the attention of the Dental School the Revised Syllabus which has been drawn up for their benefit by Mr. R. P. Rowlands, and which we publish in the present issue. Where certain subjects have as it were to be skimmed, it considerably lessens the anxieties of the student if he have some guide by which to read. The present syllabus, though full, has been carefully selected, and will be invaluable for reference.

DURING his life at Guy's the name of Wordsworth Poole was synonymous with earnest endeavour and honest accomplishment, and we note with pleasure that his work at the British Legation at Pekin has added honour to the reputation of himself and his hospital.

IN his book "The Siege of the Pekin Legations," the Rev. Rowland Allen writes:— June 20th: "Directing everything, portioning out rooms, helping everyone was Dr. Poole, indefatigable, unwearied, ever cheerful. That day he did the work of ten men."

AGAIN on June 24th: "The wounded were also happy in being under the charge of two such able surgeons as Dr. Poole of the British Legation, and Dr. Velde of the German. Both these men had seen war before, and had had experience in treating the wounded. Both were men of great skill, unsparing diligence and cheerful sympathy."

WE learn that E. R. Row is serving in South Africa as Surgeon-Captain of the Queensland contingent.

WE have received an anonymous letter concerning the disabilities under which surgeons in the navy are alleged to be suffering We must remind our correspondent that we do not undertake to publish letters unless the author's name is sent as a guarantee of good faith.

AFTER an indifferent commencement of the present season the Hospital Cricket XI. has of late shown much improved form, both in batting and fielding. Wyatt and Langdale have both been prolific scorers, showing to great advantage in the matches against Reigate Priory and Westminster Hospital, in both of which games Guy's scored easy victories. Of the bowlers, Wetherell, Cowper, Morgan, and Wyatt have proved the most successful.

THE Hospital Cup-tie against Westminster Hospital was played on Tuesday, the 4th inst., and Guy's secured a decisive victory, thus qualifying for the third round. The Hospital innings of 509 runs for 9 wickets was notable for even scoring, while the rout of our opponents who were disposed of for the small total of 18, speaks well for our bowling and fielding. We trust that fortune may smile upon us in the remaining rounds, and that the Cup may again find a place in the smoking-room.

A Case of Obstructed Labour by Double Ovarian Tumours—Cæsarian Section.

E. R., æt. 38.—Primipara, was admitted under Dr. Horrocks into Victoria Ward, on Friday, May 3rd, for difficult labour. She had been married twelve years. Husband was alive and healthy. She had never before been pregnant. Menstruation commenced at fifteen. Periods were regular and discharge scanty. Some pain always preceded periods by a day or so and subsided with onset of flow.

She last menstruated on August 4th, 1900.

At the fourth month of pregnancy patient experienced much griping pain in both left and right sides of abdomen. There was an associated dragging down pain in hypogastric region. These pains were intermittent at hourly intervals and never left her for a single day. As pregnancy progressed the pains increased both in frequency and severity, and her sleep was much broken or prevented. She always felt that opening her bowels would relieve the pain, but defæcation increased the pain with little or no subsequent benefit.

On Monday, April 29th, 1901, 11 p.m., cramp-like abdominal pains commenced, and were repeated every half hour. At 2.30 a.m., Tuesday 30th, a gush of "waters" came away, patient said about a quart. "Waters" continued dribbling away, and the pains were repeated at shorter intervals. Thursday, May 2nd, a doctor saw her, and she walked about till Friday morning. As the labour made no progress she was sent up and admitted mid-day, "waters" continuing to dribble away.

On admission, patient had a high colour, face was congested, pulse good. The cramps were felt to be uterine contractions, occurring every few minutes. Mr. Targett saw patient, she appeared to be full-time pregnant, and nipples were much retracted. The fœtal heart was heard to left of and below level of umbilicus.

Vaginal examination showed that membranes had ruptured, and head of fœtus could be made out above the brim. Cervix was high up at level of pelvic brim and pushed forwards. The posterior fornix was much bulged down by a tumour which felt very hard and knobbly, and could not be pushed up.

Abdominal examination.—The abdominal swelling was more or less median and pyriform. On the left side of abdomen, near the anterior superior spine, there was an additional small elastic tumour, which became obscured when uterus contracted. In area it was of the size of the palm of a hand. It was freely movable, more so than a fibroid would be, and it was therefore regarded as ovarian.

Dr. Horrocks saw patient at 3 p.m. He made a vaginal examination, and noted that the tumour pressing against posterior fornix seemed fairly fixed. He decided to operate at once.

Patient was taken to theatre and anæsthetized. Abdomen was rendered as aseptic as possible. An incision, commencing one inch to left and above level of umbilicus was made, and continued downwards towards middle line for five inches. Incision was deepened down to peritoneum. The uterus could not be taken out through this opening, and the incision was prolonged upwards and downwards two inches each way. The gravid uterus was then pulled forwards through this opening, and the tumour was felt passing down behind uterus and filling up Douglas' pouch. An attempt was made to pull it up, but the tumour was found to be firmly fixed to rectum below. It was decided to open the uterus and extract fœtus. The uterus appeared normal in colour and consistency; but was twisted slightly on its long axis to the right. An incision five and a-half inches long was made through the exposed wall of uterus, which was outside the abdominal cavity at the time, in a direction slightly inclined to line of abdominal incision, and approaching nearer to middle line of body of uterus. The placenta was seen adherent in front, and had to be detached to expose the fœtus. The legs and trunk, followed by shoulders and head, were extracted. The cord, followed by placenta, which peeled off easily, was then turned out. Some recent clots were turned out. During this

procedure the uterine vessels of both broad ligaments were digitally compressed. The wound in uterus was closed by means of twelve interrupted silk sutures, which went through serous coat and half way through musculature of uterine wall. There was little bleeding. The uterus was gently kneaded and contracted very well. The left ovary was seen to contain three small tumours, and the pedicle of this mass was transfixed, ligatured in the usual way and the tumours removed in one mass.

The tumour on the right side replaced the right ovary, and was firmly adherent to rectum. The rectum was freed, and the pedicle of tumour secured, ligatured and removed in the usual way. The area of adhesion to rectum was size of half-a-crown, and was situated at bottom of Douglas' pouch. There were no adhesions to uterus. The right ovarian tumour was the size of a cocoa-nut. Some free fluid was found in peritoneal cavity when abdomen was first opened, and subsequently throughout the operation there was very little bleeding.

Abdominal wound was closed by one layer of interrupted silkworm gut sutures, and skin edges approximated by continuous horsehair sutures. The pulse continued good throughout the operation, of frequency, 60. There was no retching or vomiting during operation.

Parts removed: I. Female child, full time, placenta normal, funis pulsating. Cord tied four inches from umbilicus. There was blue asphyxia, and later on, after immersion in cold bath, respiration became fully established.

II. Tumour from left side consisted of three small nodules, the ovary containing a corpus luteum of pregnancy, and a portion of left Fallopian tube with fimbricated extremity. Two of the masses were attached to distal end and one to the proximal end of ovary. They were size of Tangerine oranges, free, sessile, and elastic to touch. They contained no fluid. Corpus luteum measured one inch by half inch, was yellow, oval, long axis vertical, with no effusion into its substance. Ovary contained many Graafian follicles.

III. Tumours from right side consisted of a mass of polypoid tumours like a bunch of grapes, most of them projecting free from their pedicle, they varied in size from a marble to a large orange. Most were like those from left ovary, but the others, notably the largest, were as hard as bone. They contained no hair, teeth or other obvious epidermal structure. That tumour which had been freed from its attachment to rectum was partially necrotic—though still hard—and hæmorrhagic effusion into one half of its substance had occurred. There was no naked-eye evidence of secondary growths.

IV. The free fluid found in peritoneal cavity when abdomen was opened, had the appearance of ascites. It was easily soaked up with a sponge.

There was some vaginal oozing of blood noticed as patient was put back to bed.

A catheter specimen of urine drawn off on admission showed albumen 16 parts per 1000, otherwise normal.

May 4th.—Patient had a good night and is feeling better to-day. "Cramp" over lower part of abdomen frequent. Temperature 100°, pulse 100, good volume and regular.

I.N. Hgr. ¼ was given previous evening.

May 5th.—Frequent vomiting commenced 10 a.m. Fluid brought up seemed to be altered blood. Patient was fed rectally, but vomiting continued. Pulse rate increased to 140 in afternoon, pulse wiry and very feeble.

May 6th.—After slight apparent improvement she became pulseless at 5 a.m. and died.

Post-mortem.—About a pint of blood found in peritoneal cavity. There was oozing from the right pedicle. Intestines adherent over back of uterus. Lungs were emphysematous, hypostatic congestion of bases. Right kidney small. Left kidney was larger, showing compensatory hypertrophy, otherwise normal. Heart and remaining organs healthy.

Death was thought to be due to acute septicæmia.

Microscopic examination of growth showed it to be a dense sarcoma varying in consistency; it was composed chiefly of fusiform cells, arranged in bundles, and the tissues were permeated by the usual thin walled vessels.

Notices.

LECTURER ON METALLURGY.

Applications are invited for this vacant Lectureship, and should be addressed to the Treasurer, Superintendent's Office, Guy's Hospital, London Bridge, S.E., on or before Thursday, June 13th, 1901.

LECTURER ON BIOLOGY.

Applications for this post, which becomes vacant on October 1st next, should be addressed to the Treasurer, Superintendent's Office, Guy's Hospital, London Bridge, S.E,, on or before July 1st. Particulars of the duties and remuneration may be obtained from the Dean of the Medical School.

A DEMONSTRATORSHIP OF CHEMISTRY AND PHYSICS, AND ONE OF CHEMISTRY AND TOXICOLOGY

will become vacant on October 1st next. Applications should be addressed to the Treasurer, Superintendent's Office, Guy's Hospital, London Bridge, S.E., on or before Tuesday, June 18th. Particulars of duties may be obtained from the Dean of the Medical School.

From the Gazette's Special Pathologist.

NOTICES.

H.R.M., HASTINGS.—The tubercle bacillus was not found in the sputum.

E.R.M., HASTINGS.—The sputum contained a small number of tubercle bacilli.

J.H.P., BAMPTON.—The tubercle bacillus was not found in the sputum (marked H. N.).

PATHOLOGIST.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

London Diplomats and the London University.

SIR,—The discussion on this subject has lasted for some time, and I remember a letter of mine in your GUY'S HOSPITAL GAZETTE issue of January 28th, 1893, which first began my knocking at it.

Not from the view of the "College" men do they appear naive and ingenious in their desire for higher standards, and they only dimly see that they will have to put up with a great deal more careless depreciation at every turn in life if they persist in following those portals of entrance to the profession which they have chosen. I have not seen the circular mentioned in "Passim" of your last issue, but it may be puerile because it has not sufficiently maturely expressed the "College" men's regrets at the course pursued—in spite of years of hospital syllabus warnings tucked virtually out of sight—and which will only be adequately realised or eloquently intensified the longer and more irrevocably wrapped up they become in the mere "licence," and thus become committed in the future with no progressive path open to them. Banks of alphabetical distinctions from universities do not determine greatness it may be said and abundantly pointed out, but that does not mean that those with the better letters after their names, compared with the "licence" letters, are not the petted of the authorities and are the recipients of graciousness which is privileged, to the unrecognised, obliterated, and discarded claims of the "College" men. So-called research, not original inquiry, is too frequently the ponderous appreciation of the connoted work of others, with often no burst even of new support, and is, as it seems to me, especially the practice and the province of men full of degress who, no better possibly in original faculty, insight of comparisons or careful grouping along the lines of extending knowledge than the "College" men, very frequently crush the latter out by virtue of the weight of their university titles, and is due to places or opportunities being granted them with the forgone and unfair conclusion that it adds to laboratory or scholarship prestige.

The giants at precise cramming, or the most exact students at pass examinations, as a rule only get through with quantitative work and not with qualitative distinction. There always appears the plentitude and redundancy of accepted tenets, so much of which must be stored up for momentary use and much necessarily forgotten or replaced in the future; this kind of storing quietly suits the lead the ladies take, too, as it has all been nicely and abundantly done before. The differences in the quantities required at the London medical examinations for qualification are surely not so insurmountably great and difficult that the average man should not be made—and that seems the necessity—to pass a proper university matriculation, but not necessarily higher than any matriculation in the kingdom—unless the supposed candidate is proceeding to an honours course—and thus open the way to the other stages for a degree for London's students.

In the marking-time period between the out-of-date but inherited past and the changes which will eventually have to come, I, besides "Passim," would advise any one and each one to conquer the disinclination for the start and proceed to pass a university matriculation, with the subsequent stages for an existing M.D., even if it should take ten years as long as the present curriculum, and do it whilst really within the reach of still youthful energy; whilst on future reflection it will not appear so unpopular a suggestion to have been given as Disraeli has stringently considered all advice. The Aristotelian "mean" did not infer that in the social state there should not be a complete and properly organised and well regulated educational system for higher education, and it is that this "mean" has a higher value or obligation now, and also that by so extensively using the "licence" only we seem behind in the general advances of the times, that it does appeal to me that the dignity of our calling is curtailed and shackled by the non-recognition of the required degreed status for all medical students who "pass" their examinations in London. The policy of sense is very old, as all who early read old books know, and it is to be hoped it will prevail in this generation for this degree question.

As to the "Colleges" appointing delegates to apply to the University of London, and therefore probably to claim their rights under the Lond. Univ. Act, 1878, surely it is the proper policy to wait and see what their action leads to; they have already applied for the M.D. status for themselves and it was refused, so I cannot agree that in London a M.D. England should be suddenly—and somehow!—founded with the certain result of overwhelming opposition from every quarter; but it is fairer to wish that the portals of the present London University should be extended to embrace properly matriculated students at the London Medical Colleges.—I am, yours faithfully,

H. ELLIOT-BLAKE.

The Title of Doctor.

SIR,—I have read with feelings of surprise your remarks upon the above subject in the last number of the GAZETTE. I cannot understand why you should take up an attitude antagonistic to the wishes of the majority of the profession and of the majority of students at all hospitals. The majority of medical men are general practitioners, and none would question that the majority find it convenient to have the "title of Doctor," not because it conveys any superiority or distinction, but simply and solely because it is a matter of convenience to be so designated.

The Universities stand out against this demand for a simplification of the matter because they have vested interests which they seek to protect under the cloak of that fetish known as "the higher education." Surely this is an absurd contention, because an "M.D." is not necessarily qualified in a higher manner? All acknowledge the "M.D. London" to be a degree of a superior kind, and the possession of it is certainly a distinction in itself, but that is no reason why the average man should not have an average M.D., or at least a definite acknowledgment from the qualifying colleges that he has the right to the "title of Doctor." It is, I maintain, the average man for whom this demand is made. The general practitioner wants to put "Doctor" on his door-plate and visiting card, and give his name as "Doctor so and so" when calling upon his patients. It is simply a matter of convenience which the public in general have thrust upon him. People want him labelled; and he desires to meet that demand. The average man makes no claim to superiority in the matter of the title; he denies that there is any implied superiority in such a title. He says, "I am a doctor, let me be called Doctor."

For gold medalists and those who seek medical honours he has, I hope, the greatest respect. He is ever willing to accord them the full measure of their attained glory, but the mere title of Doctor he holds is no such honour. It is a right that he, as the average medical man—the general practitioner—claims as his, and which he intends to use every means in his power to obtain.—Your obedient servant,

FREDERICK VICARS, M.D. Brux.

Ovington Gardens, S.W.
May 16th, 1901.

P.S.—I may add that the GAZETTE is my only information regarding this "circular," which I have not seen.

DEAR SIR,—There is a movement on foot to band ourselves—the London diplomates—together, with the object of improving our status in some way. It is suggested that we should approach the Colleges with a view to obtaining some degree in medicine, or its equivalent. Without presuming to give advice, I should like to put before Guy's men, past, present and future, a few points they ought to consider before joining this new society. I have enquired of one, who is in a good position to know, and he corroborates my opinion that, practically, the colleges cannot, if they would, obtain power to grant an M.D. Supposing for a moment that they could, and that it were to be retrospective, of what value would a degree be in anyone's eyes that was given away wholesale to general practitioners? If some of our professional friends think it worth while now to speak disparagingly of our present qualifications should we not put a deadly weapon into their hands in accepting an M.D. Eng.? There is nothing in any conceivable way spurious about an M.R.C.S., L.R.C.P.; but a retrospective wholesale distribution of M.D.'s would be at least open to criticism.

After a good many years of practice, I can say that to the best of my belief the general practitioner from London certainly does not stand lower in the public estimation than he who has gone elsewhere to arm himself with an M.D. If anyone thinks of doing anything but general practice he ought to know it in time and provide himself with any extra qualifications that are likely to be necessary. The public, so far as I know, trouble themselves not at all about our titles, we are judged as men are judged in any other profession, people take us as they find us.

But there are much larger considerations involved than these little personal concerns of ours. We do *belong* after all to a profession, and by that we mean that we, most of us, owe very much more to the profession than the profession owes to us. Could we do a more hurtful thing to our profession than to deliberately band together one lot of men with the avowed object of making public comparison between ourselves and the rest of the profession to our own advantage? I have no intention of saying hard things, that does no good, but to my mind any such procedure is not in the true sense "professional." This is a weighty matter and demands most serious consideration from everyone who wishes to advance the best interests of his profession. We have an association, one of the most democratic, which has done immense service in the past and which, with the co-operation of all registered practitioners, would be capable of raising the status of the whole medical profession. What we most want at present is *bonâ fide* unions, on both the scientific and the political side of our profession, only those who have been in practice know fully the gravity of our present want of union. Some of us think it is becoming almost a vital question and are working hard to promote union. We, therefore, have a right to ask the younger men to think twice about putting personal before professional considerations, for I take it no one will deny that this new movement tends in that direction.—I am, Sir, yours truly,

M.R.C.S., L.R.C.P.

Appointments.

NAVAL AND MILITARY.

Staff-Surgeon ROBLEY H. J. BROWNE, R.N., has been appointed to the Royal Yacht *Osborne*.

Captain W. G. BEYTS, R.A.M.C., is transferred from the Punjab to Chester.

Lieutenant A. J. HULL, R.A.M.C., is posted to Woolwich for duty.

CHARLES H. BRANGWIN, L.R.C.P. Lond., M.R.C.S., and GEORGE T. COLLINS, M.B. Lond., have been appointed Civil Surgeons, South African Field Force.

E. W. CORFE, L.D.S., has been appointed Civil Dental Surgeon, for service in South Africa.

From the Under Side.

"HULLO, three, how are you?" in a resonant bass that seemed to fill the universe. But three had no opportunity to impart the interesting information, for a gentle treble interposed: "Hush, hush! you must not talk yet; it is only half-past four." "All right, nurse"; and the echoing base sank again to silence. It had served its turn: I opened my eyes and looked at the many-paned windows standing out clear in the pale grey dawn, at the yellow clusters of lent-lilies massed in white vases on the table to my right, across the double row of little beds with their red and white counterpanes, their red and white curtains hanging so strangely on the semi-circular bar, away to the glow of the firelight at the further end, and back to my own bed, differing from the rest by its condition. The pillow was nearly on the floor, the upper sheet was quite there, my head was in close proximity to a sort of letter-file, and the cool air of heaven was playing round my feet. I have slept in Swiss chalets, in German inns, in Highland cottages, in the berths of Channel steamers, but for sheer discomfort I should return to that bed. Not that pains enough were not taken with it. It was brought into a state of order and comfort every morning at seven, an order and comfort that lasted alas! only till I made my own toilet on it at a quarter-past: it was made "tidy" at half-past nine and remained so till the dresser came at ten: it was restored to neatness at one, and again and again till you had lost count; but not even the princess under whose twelve feather beds lay the crumpled rose-leaf could have been more uncomfortable than the occupant. The mistake was probably in regarding it as a bed; for it served many other useful ends. It was a dressing-room, inconvenient but perhaps sufficient; Scriba used it as a hat-rack; Scotus flung his instruments on it as he dried them, discussing "Ops"; Hyle put her dusters on it while she arranged her table, and Lizer leaned her broom against it when she shuffled off on some distant errand.

The day really began with Lizer, as it may begin elsewhere with Scotch and Polly. At five, it is true, Mrs. Harris crawled up the ward in her little black bonnet and shawl. I was too "religious" for her, but she had her chums. "Good morning, Mrs. Harris, I saw you coming out of the Pig and Whistle last night."

"You gow on, I down't know now Pig and Whistle."

"Oh you do! Just by the pawnshop."

"What, that plice at the corner as the doctors pop their instruments? Well, I wasn't there."

The statement was not convincing in itself; but Mrs. Harris plainly—very plainly—had a soul above such carnal delights, and on bright mornings would grow dumbly eloquent on the sunrise over the Thames and the charms of the Tower Bridge. With Mrs. Harris's arrival the ward awoke and fell to talk.

"Wen did 'e come in?"

"Larst noight, fetched 'im in a stretcher."

It was only in part correct; but then so few of our statements were otherwise. They satisfied us, however, and carried us on to breakfast; for breakfast was the message of a stumpy boy, referred to freely in his presence, but out of his hearing alas! as "dumby," a weird inarticulate bundle in a scarlet wrapper who stood by my bed, put his finger in his open mouth and pointed with rapid vehemence first at me, then toward the end of the ward.

"'E means yer to go rarned there for your breakfast."

"Now, 'e means nurse 'll bring 'im some." I never knew what he meant, for he went off grinning. It was plainly better to be deaf and dumb than such an incompetent as that. And then Lizer came, with the weary, weary hospital step—a step that became a limp when afternoon sank to night, and her face had emerged, a silver moon, from its workaday eclipse,—Lizer slouched in, seized a brush and began to make a dust. She called it sweeping. The sweeping synchronized with my toilet, much to Lizer's annoyance.

"Oh, Lizer, dear Lizer!"

"You garn, or I'll 'it you on the 'ed with the brash."

She never did; that was only Lizer's fun. If ever she broke anything, head or heart, glass or crockery, as slanderous rumour asserted, it would not be by 'itting it. The cloud-compeller passes on; Lizer's dust returns to its dust; the bed is made, and if the morning still seems dead and yourself inclined to wait for better times in sleep, a clear bright voice arouses you: "Good morning, how are you this morning?" and you look up to find it is a very good morning indeed, that the ward is flooded with sunlight, that the chirping of sparrows may be as musical as the skylark's thrill, and that you are incomparably well.

"You were asleep when I looked at you last night." Fortunately; for how else could you have dreamed of a blue-robed archangel with silver breastplate and white wings? But the vision has faded. "Good morning, Good morning, Sister; may flowers ever bloom round your path."

It would not have been wise to sleep all through the night; that would have meant missing the quiver of the firelight through the semidarkness, the flickering shadows on the wall, the flash of the moving lamp, the medical inspection of the chart, the whispered instructions, the ceaseless frou-frou of the dress of the night nurses, and the comfortable feeling of being healed and cared for.

And now with eight o'clock the impersonal force of the Medical School is beginning to recover its grip of the ward again; the occupant of each little bed sinks back into himself; he is becoming a "case" again, an uninteresting case,

Content a needy suppliant to wait,
While dressers interpose and pros. debate.

Pull yourselves together, cases; tighten your nerves, eight will strike in a moment. A vague terror fills the air. Not at all; it's merely the coming of the day nurses, those devotees to cleanliness and polish. For,

gracious powers! how those gentle ladies did bully one another and us. "Forgive me for nagging, I am but a woman," Reade says somewhere. Then forgiven they shall be. For they were very much women, all either clever or kind; and they dusted and tidied and polished as no housemaid has dusted and tidied and polished since time began. What an ideal ward it would have been but for the patients!

When all was fittingly neat, sweets to the sweet the dressers came, pleasant-tempered, many-thumbed, and struggled with us, dragging screens about. How we admired them, even when they mauled us! "Doctor," we called them, quoting them to each other as heaven-sent oracles, content if only two of them did not consult to contrary advice, for that puzzled us. They passed; all storms pass. Sister's canaries break out into song; Sister moves about with pleasant speech and helpful hand; Matron makes her stately visit, incedit regina; the sun progresses to the further windows; the morning is over.

If morning brings its duties, afternoon brings its excitement. Our friends troop up and sit by us, awed, awkward and speechless, till the tinkling bell sets them free. Simpkinson stamps in, with waistcoat glowing gorgeous against the afternoon sun. "Any exciting case about, nurse?"

"No, I think not; there's seven, he's——"

"Oh, that's no good!"

And Simpkinson takes his waistcoat away again to illuminate the outer world. We were not exciting enough for Simpkinson. Or excitement is hushed; a solemn stillness holds the ward; the tap-tap of Hyle's heels is lifted laboriously into silence, the canaries are muffled and mute, the heartless sparrows outside alone chirp a subdued protest; there is no other sound. Tell me, my soul, can this be death? No talking, soul; away with the profane vulgar; stand to the altar, priestesses; victim, stifle your groans; and room, room for the great Chirurgus; for on that silver silence will fall the golden jests of Chirurgus, over it will ripple the unnumbered laughter of his acolytes, also, sad to say, the vague whimseys of their diagnosis. Then the wonderful, the perfectly-managed, the beneficent procession of the stretchers: and after that the wild joys, the romantic pains of the return to consciousness.

And through, and among it all, hovering in and out, alighting here and there like vultures on a battlefield, "are the brother doctors of the soul;" cheek by jowl with the first surgeons of the twentieth century, these mediæval apothecaries ladling out their indiscriminate brimstone and treacle on every luckless mortal that somehow has fallen under their hands. There were apothecaries of every blend. The affectionate, chiefly treacle. "Well, friend, how is it with you? Ah! God bless you! lift up your heart. God bless you! Let me leave you this." This was a copy of a periodical paper, an improving print dated September, 1897. I meant to keep it; this and a few well-healed scars would soon be my only record for three weeks; but the fates, in our modern speech the nurses, willed otherwise. It was tidied. Everything was tidied. Then the sardonic, chiefly brimstone. "How long have you been here?" "Where do you come from?" The Argumentative: "A hour's talking won't make it any different." The feminine: but there I escaped; thirty's handsome, sunburnt soul had taken so long to save that there was no time left before tea. "I rather knocked the old girl," says thirty, and goes back to his talk of the war. Could there not be a D. provided with which to call in these spiritual practitioners when desired? Like Dame Quickly, we hoped there was no need for that yet; so we feigned sleep on their approach, and if taken unawares, lied to them—we called it "being polite;"—we criticised them after they had gone, and rid ourselves of their flowers with curses or complaints after our manner. But there was relief even from these; when we sat round the fire while Sister read the evening prayers, "as if she meant it," twenty said, then we forgave and forgot.

It is an experience of a lifetime to have been through, a sight for a life-time to have seen, an infinite mass of detail marvellously planned and administered, a wondrous co-operation of benevolence and skill, the source of a world of good and of gratitude. We all had a grievance, I was informed; but if there were moments when I hoped that before the end of the century cooking should be done in kitchens, nurses all learn to make beds, and an antiseptic be found against the attacks of the "bacillus religiosus," these were but moments of impatience—who is more impatient than a patient?—and of such moments there are few at Guy's. May Guy's flourish.

Reviews.

The price of books submitted for review should in every case be stated.

Difficult Labours. By G. Ernest Herman, M.B., F.R.C.P. New and Revised Edition, 1901. Price, 12s. 6d.

Students will welcome a revised edition of this popular and very readable work of Dr. Herman's; its size remains practically as before, and the chief alterations will be found in the chapters devoted to Cæsarian section and symphysiotomy.

In the technique of Cæsarian section the Lembert suture through the uterine peritoneum is still advised. So far as experience at Guy's goes, this has been proved to be unnecessary and only prolongs the operation; for some time past only deep uterine sutures have been used here, and the results are very successful; even if a little lochial fluid should escape between these sutures into the peritoneum, this fluid, provided the operation has been undertaken at the proper time, is quite aseptic.

Dr. Herman, in his new edition, advocates the removal of the body of the uterus as a means of sterilization after Cæsarian section, the removal being effected by a

V-shaped incision with its apex corresponding to the top of the cervical canal, and the operation finished by sewing over one another the two flaps left behind.

In his description of symphysiotomy the author lays particular stress upon the necessity of choosing suitable cases, namely, those in which there can be no suspicion of the head being too large in proportion to the size of the pelvis, so avoiding the risk of too wide separation of the pubic bones. In this edition he does not mention the mode of operating by the open incision, but favours the division of the inter-articular cartilage with a sharp-pointed tenotomy knife subcutaneously; he points out that symphysiotomy thus performed might reasonably be repeated more than once, and that with a competent nurse, an unyielding bandage would alone be sufficient to keep the separated bones in contact.

The chapter on Accidental Hæmorrhage remains unaltered, the paragraph on plugging the vagina being brief and not encouraging; in view of the recent controversy concerning this particular line of treatment, and the good results obtained in suitable cases at the Rotunda Hospital, we might have expected a more detailed discussion of the question.

We notice that there are three or four new illustrations, but there are some figure references in the section of Chapter XII., dealing with rickety pelvis, which are still incorrect, and figure 40 continues to read "expulsion" instead of "evolution."

Bacteria. By George Newman, M.D., F.R.S. Edin., D.P.H. Camb., Demonstrator of Bacteriology in King's College, London, &c. (London: John Murray. 1900. Demy 8vo, pp. 397.)

It is difficult to know what to say about this book, because, as the author says in his preface, it is an endeavour to write a popular account of the science of Bacteriology. On the one hand, the book is written in an interesting manner, and any layman of average intellect would be able to derive a considerable amount of pleasure from the perusal of it, and a very fair idea of the ground covered by the science. On the other hand, there is often a haziness surrounding the subject which he is studying, and in many parts the account gives us the impression that the author has been content to transfer it from some other text-book without having had more than a slight practical acquaintance with the subject. For those for whom it was written, the book will be useful, this fact is evidenced by the publication of a seccod edition within a year, but more than this we cannot say. It is not of much value for those who are taking up bacteriology seriously.

Appointments.

CIVIL.

PERCIVAL, G. H., M.B., M.R.C.S., has been re-appointed Medical Officer by the Northampton Rural District Council.

Sport.

Cricket.

BECKENHAM v. GUY'S.

This match was played at Honor Oak Park on Saturday, May 25th. Beckenham, with rather a strong batting side, won the toss and went in first. After putting together a total of 283 for seven wickets, they declared, the highest scores for them being H. L. Baker, who played a good innings of 107 not out, P. C. Baker, who hit up a rapid 74, and A. A. Baker, 56. Guy's, on going in, scored fairly evenly, Wetherell and Morgan, after the fall of the eighth wicket, playing out time; thus the match ended in a draw.

BECKENHAM.

H. L. Baker, not out	107
E. H. Stenning, run out	2
A. A. Baker, lbw, b Wyatt	56
H. C. G. Boyle, c Langdale, b Wyatt	0
J. K. Stenning, c Wetherell, b Wyatt	4
W. M. Torrens, b Wetherell	7
G. J. Gulliver, b Wyatt	0
P. C. Baker, c Wetherell, b Wyatt	74
F. D. Browne not out	32
Extras	1
*Total (7 wickets)	283

*Innings declared closed.

C. O. Cooper and C. M. Baker did not bat.

GUY'S.

H. D. Wyatt, c Gulliver, b C. M. Baker	10
H. Barber, c Boyle, b A. A. Baker	16
F. Morres, b Stenning	16
R. C. Poyser, b Stenning	19
H. M. Langdale, b Boyle	73
G. S. Graham-Smith, b H. L. Baker	16
A. R. Wilson, c Cooper, b H. L Baker	6
E. A. Collins, b Boyle	0
M. C. Wetherell, not out	12
E. Morgan, not out	17
Extras	25
Total (8 wickets)	210

J. S. Booklers did not bat.

GUY'S v. LONDON COUNTY.

The return match was played with the above club on Wednesday, May 29th, at the Crystal Palace. London County went in first, and were dismissed for the moderate total of 152, although at one time it looked as if this score would be much smaller. Barber and Wyatt started the innings for Guy's, putting up 108, before they were separated, Barber being the first to leave with 52 as his share. Wyatt did not stay much longer, but later in the innings Wilson hit hard for 28 not out. This is the first match Guy's had won, and was, in some measure, due to the great improvement in fielding.

LONDON COUNTY.

A. F. Newman, c Wetherell, b Cowper	0
B. Westmacott, c & b Wetherell	2
H. C. Stapleton, c Graham-Smith, b Cowper	0

H. L. Matthews c Graham-Smith, b Wyatt	52
W. F. Frith, c Wyatt, b Poyser	27
N. A. Damian, b Wyatt	6
— Murch, c Morres, b Wyatt	20
Dr. W. F. Umney, b Wetherell	0
E. H. Lulham, c Wyatt, b Cowper	12
C. Haywood, b Wilson	15
L. Covell, not out	14
Extras	4
Total	152

GUY'S.

H. Barber, c Matthews, b Frith	52
H. D. Wyatt, c Damian, b Frith	64
H. M. Langdale, b Damian	25
R. C. Poyser, b Frith	4
F. Morres, b Damian	7
G. S. Graham-Smith, not out	20
A. R. Wilson, not out	28
Extras	19
Total (5 wickets)	219

M. C. Wetherell, S. C. Bowle, E. A. Collins and C. M. L. Cowper did not bat.

GUY'S v. ELTHAM.

This match was played at Eltham on Whit-Monday. Guy's batted first, and except for some good strokes by Poyser, made a poor display, our opponents winning easily by 109 runs. At their second attempt Guy's made a better show, Barber having hard luck in being run out when getting towards his century.

GUY'S.

	1st Innings.		2nd Innings.
G. S. Graham-Smith, c Wood, b Haywood	5	b Logan	36
H. Barber, b J. C. Wood	1	run out	80
R. C. Poyser, b Haywood	40	run out	6
S. C. Bowle, c T. Johnston, b Haywood	8		
M. C. Wetherell, b J. C. Wood	9	c Wood, b Logan	0
A. R. Wilson, b Haywood	10	b Logan	8
H. R. Grellett, b Haywood	15		
E. A. Collins, b Haywood	13		
R. Willan, c K. Johnston, b Haywood	0		
H. S. Palmer, b Atkinson	0		
J. S. Booklers, not out	2		
Extras	4	Extras	12
Total	107	Total (4 wkts)	142

ELTHAM.

A. T. Jackson, c Palmer, b Graham-Smith	40
W. Young, b Wetherell	12
W. McFarlane, c Bowle, b Poyser	26
J. C. Wood, b Wilson	39
— Haywood, b Wilson	29
F. D. Logan, not out	19
J. Johnston, lbw, b Wilson	0
J. Eagleton, c Wetherell, b Wilson	3
K. Johnston, b Wilson	8
G. A. Atkinson, c Poyser, b Wilson	6
P. C. Bland, b Booklers	0
Extras	34
Total	216

GUY'S v. REIGATE PRIORY.

This match was played at Reigate on Saturday, June 1st. Reigate went in first and were all out by 3.15 for 187, of which E. A. English made 114. Morgan bowled well, taking six wickets for 50 runs. Guy's started with Barber and Wyatt. The former did not stay very long, but on Langdale joining Wyatt, victory was secured after an hour and a half's play, without the loss of another wicket, Wyatt being not out for a brilliant 104, without giving a chance, Langdale's share being 77. Tea was then taken, and rain coming on put a stop to further play for the day. Scores:—

REIGATE PRIORY.

H. Webber, c Barber, b Cowper	5
E. A. English, c Barber, b Morgan	114
R. W. Neale, c G. Smith, b Morgan	19
J. W. Neale, c Cowper, b Morgan	0
F. J. Nightingale, b Morgan	0
H. K. Hughes, b Booklers	14
T. H. Hughes, c Morgan, b Cowper	12
D. J. T. Turner, b Morgan	4
Dalton, b Morgan	8
F. C. Morrison, not out	6
Brickett, lbw, b Wetherell	0
Extras	5
Total	187

GUY'S.

H. D. Wyatt, not out	104
H. Barber, c T. H. Hughes, b Turner	4
H. M. Langdale, not out	77
Extras	5
Total for one wicket	190

R. C. Poyser, F. Morres, G. S. Graham-Smith, M. C. Wetherell, E. Morgan, E. A. Collins, J. S. Booklers and C. M. L. Cowper did not bat.

CUP TIE.—SECOND ROUND.

GUY'S v. WESTMINSTER HOSPITAL.

Having been drawn a bye in the first round of the cup tie, Guy's made their first attempt in the second round, on Tuesday, June 4th, and managed to gain a most decisive victory, their opponents making a very poor show both in batting and bowling.

WESTMINSTER.

G. L. Bunting, c Grellet, b Wetherell	4
W. C. Nimmo, b Cowper	0
T. N. Crowther, hit wicket, b Wetherell	5
P. Farrant, run out	0
H. G. L. Haynes, b Cowper	0
T. B. Hickley, b Weatherell	0
C. H. M. Hughes, b Cowper	6
O. P. N. Pearce, c Morres, b Cowper	0
C. C. Austen, run out	0
T. H. Bennett-Bailey, not out	2
— Whitehead, absent	0
Extras	1
Total	18

GUY'S.

H. D. Wyatt, b Nimmo	76
H. Barber, c Austen b Bennett-Bailey	39
H. M. Langdale, b Austen	106

R. C. Poyser, c Whitehead b Farrant	22
F. Morres, c Bunting, b Farrant	50
G. S. Graham-Smith, c Nimmo b Farrant	11
A. L. Foster, c Haynes b Austen	16
M. C. Wetherell, b Austen	73
H. R. Grellet, not out	52
J. T. Booklers, c Whitehead, b Farrant	0
C. M. L. Cowper, not out	30
Extras	34
* Total (9 wickets)	509

*Innings declared closed.

GUY'S 2ND XI. v. ST. THOMAS'S HOSPITAL 2ND XI.

This return fixture with St. Thomas's was played at Honor Oak Park, on Saturday, June 1st, and after a very good match resulted in a win for us by three wickets; Guy's requiring 179 with one hour and forty minutes for play, the runs were obtained within six minutes of time.

ST. THOMAS'S.

R. Mould, c and b Bowle	14
W. E. Denniston, b Chignell	27
T. W. Downes, b Chignell	10
H. C. Devas, b Norton	12
L. F. Hanbury, b Bowle	63
H. S. Sington, b Norton	0
S. W. Hanbury, b Norton	2
J. H. Bletsoe, b Bowles	5
G. Hutchinson, b Bowle	9
L. Bathurst, b Bowles	29
B. M. Dunstan, not out	0
Extras	7
Total	178

GUY'S.

H. M. Tolhurst, c Downes b Mould	9
E. L. Norton, lbw b Mould	19
T. A. Chignell, c Bletsoe b Mould	60
A. H. Turner, c Bletsoe b Denniston	43
S. C. Bowle, c Downes b Mould	4
W. H. Bush, run out	5
H. T. Palmer, lbw, b Denniston	0
R. Willan, not out	21
E. W. Strange, not out	16
Extras	3
Total (7 wickets)	180

W. G. Louison and J. Goss did not bat.

Guy's Hospital Football Clubs.

The annual general meeting of the Football Clubs was held in the anatomical theatre on May 22nd, Mr. Jacobson in the chair. After the minutes of the previous meeting had been confirmed, and the reports of the past season read, the following officers for the ensuing season were elected:—

President: W. H. A. Jacobson, Esq., M.Ch., F.R.C.S.

RUGBY.—Captain: H. A. Cutler. Hon. Sec.: R. C. Lawry. Committee: T. P. Thomas, A. O'Brien, E. Morgan, L. J. J. Orpen, M. C. Wetherell. Captain 2nd XV.: H. S. Brown. Captain 3rd XV.: H. D. Smart. Captain 4th XV.: T. Norman.

ASSOCIATION.—Captain: H. Barber. Hon. Sec.: E. L. Norton. Committee: H. P. Wiltshire, H. Bacon, A. R. Wilson, T. F. Wilson, W. M. Robson. Captain 2nd XI.: P. A. Peall. Captain 3rd XI.: W. Watney.

Guy's Hospital Lawn Tennis Club.

GUY'S v. HAROLD.

Saturday, May 25th, at Honor Oak Park.—This match was scratched by the Harold L.T.C.

GUY'S v. WANSTEAD.

Played Saturday, June 1st, at Wanstead, and resulted in a win for us by five matches to four.

Wedd and Jupp beat Bousfield and Hatton, 6–2, 6–3; beat Ide and Lawrence, 6–1, 6–2; beat Knight and Wilson, 7–5, 6–3. Bacon and Holmes lost to Ide and Lawrence, 3–6, 6–0, 4–6; beat Kight and Wilson, 6–2, 6–3; lost to Bousfield and Hatton, 3–6, 2–6. Cooke and Winckworth beat Kight and Wilson, 6–4, 6–4; lost to Bousfield and Hatton, 1–6, 4–6; lost to Ide and Lawrence, 4–6, 1–6.

Guy's Hospital "Blue."

At a meeting of the "Blues" Committee, held on Thursday, May 23rd, the following "Blues" and "Half-Blues" were awarded.

ATHLETIC.—S. P. Wadson, F. M. V. Smith, A. M. Roome, R. W. Allen. Half-Blue.—H. B. German.

CRICKET.—H. Barber, F. Morres.

ASSOCIATION FOOTBALL.—A. R. Wilson, T. F. Wilson, E. A. Collins, J. Goss, A. D. Crofts.

RUGBY FOOTBALL.—P. F. McEvedy, L. T. T. Orpen, E. H. B. Milsom, B. Glendinning, A. R. Thompson, R. G. Anderson.

SWIMMING (Half-Blues).—D. G. Greenfield, T. H. Wilks, R. Franklin, H. Bacon, R. B. Dawson, R. Whitcomb, D. Steele-Perkins, C. H. Reinhold.

TENNIS.—B. H. Wedd. Half-Blue.—H. Bacon.

Marriage.

LISTER–RITTER.—On June 1st, at St. Augustine's, Honor Oak Park, S.E., by the Rev. P. White Collard, M.A., Thomas David Lister, M.D., M.R.C.P., of Brook Street, W., and Forest Hill, S.E., to Louise Edna Bertha (Bertie), daughter of Eugene Ritter, of Winstead, Honor Oak Road, S.E.

Deaths.

DAVIES.—On Whit Sunday, May 26th, at Trevna, Newport, Mon., Andrew Davies, M.D., J.P., aged 76.

HOWELL.—On May 24th, at Cleeve House, West Hill, Wandsworth, Ethelfloeda Berthon, younger daughter of Thomas Arthur Ives and Frances Elizabeth Margaret Howell, aged 18 months.

WELLFORD.—Died of wounds received in the action at Vlakfontein, May 29th, Francis Wellford, M.B., B.C. Camb., Surgeon-Captain, Imperial Yeomanry.

ED.—F. G. G.

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Calendar of Coming Events.

June, 1901.

Sat. 22.—Messrs. Jacobson and Fripp's take-in; Drs., C. J. Pinching and O. W. Richards; Cl., E. F. G. Heap.
G.H.C.C., I. v. Past, away.
II. v. Old Charlton, home.
G.H.L.T.C. I. Past v. Present, home.
II. v. Addiscombe, away.

Mon. 24.—1.15 p.m., Clinical lecture by Mr. Symonds.

Wed. 26.—Guy's Hospital Annual Sports, 2.30.
G.H.C.C., I. v. Hampstead, away.
G.H.L.T.C., II. v. Clarence.

Thur. 27.—Messrs. Howse and Symonds' take in; Drs., G. Hollist and M. C. Wetherell; Cl., D. L. Morgan.
G.H.C.U., Address by Robert Anderson, Esq., LL.D.
Second Conjoint Exam. begins.

Fri. 28.—1.15 p.m., Clinical lecture by Mr. Dunn.

Sat. 29.—G.H.C.C., I. v. Reigate Priory, home.
II. v. Do. away.
G.H.L.T.C., I. v. Redhill, "A.," away.
II. v. St. George's, home.

July, 1901.

Mon. 1.—1.15 p.m., Clinical lecture by Mr. Higgens.
Intermediate M.B. Lond. Exam. begins.
August and October Appointment Lists opened.
First part of Conjoint D.P.H. Exam. begins.

Tues. 2.—Final Conjoint Exam. begins.
Application to Medical School Office for Schedules for First Conjoint Exam. to be made not later than this date.

Wed. 3.—1.30 p.m., Clinical lecture by Dr. Bryant.
G.H.C.C., I. v. Gravesend, away.
II. v. Merchant Taylors, home.
G.H.L.T.C., I. v. Staff.

Fri. 5.—1.15 p.m., Clinical lecture by Mr. Fripp.

Sat. 6.—G.H.C.C., I. v. Upper Tooting, away.
G.H.L.T.C., II. v. St. Thomas's, home.

Guy's Hospital Gazette.

JUNE 22, 1901.

Anæmia.

CLINICAL LECTURE BY DR. BRYANT.

May 15th, 1901.

(concluded.)

I will now again refer to the blood examination of the case under consideration, and I think you will see that in almost every respect it is characteristic of pernicious anæmia.

First count (April 10th)—

Red blood corpuscles ...	650,000
Hæmoglobin	26 per cent.
Colour index	2
White blood corpuscles ...	7,000
Polymorphonuclear cells ...	58 per cent.
Small lymphocytes ...	30 "
Large lymphocytes ..	9 "
Eosinophiles	3 "

Second count (May 14th)—

Red blood corpuscles ...	1,800,000
Hæmoglobin	5,000
White blood corpuscles ...	41 per cent.
Colour index	1·14

I recently examined a typical case of this disease at present under Dr. Pitt, in Stephen ward, with the following result.

The blood flowed very freely, it was a little paler than normal, and it did not coagulate readily.

Red blood corpuscles	903,846 per cubic mm.
Hæmoglobin	23 per cent.
Leucocytes ...	3.571 per cubic mm.
Colour index ...	1.25
Small lymphocytes ...	34 per cent.
Large lymphocytes ...	3 "
Polymorphonuclear cells	57 "
Eosinophiles	6 "

There were many macrocytes and microcytes, chiefly the former. Poikilocytosis was well

marked. There were a large number of nucleated red blood corpuscles. I counted 12 whilst enumerating 100 white blood corpuscles. They were in the following proportion:—

Megaloblasts	7
Normoblasts	4
Microblast	1

A third case, seen at my house was a male, æt. 32. Blood very pale.

Red blood corpuscles	1,650,000
Hæmoglobin	...28 per cent.
White blood corpuscles... ...	3,591

There is one point of very great interest in connection with pernicious anæmia, and that is its similarity, as far as the blood changes are concerned, to some of the anæmias which are due to the presence of intestinal parasites, and I refer in particular to the anchylostomum duodenale and the bothriocephalus latus. These diseases have been carefully studied by German observers, who have found that even to the high colour index of the red blood corpuscles, the preponderance of megaloblasts amongst the nucleated red blood corpuscles, and the remarkable reduction in the number of red discs, the blood may be compared with that of pernicious anæmia, in fact, to quote Ehrlich and Lazarus, "Severe bothriocephalus anæmia may be described as a pernicious anæmia with a known and removable cause."

The diagnosis from pernicious anæmia, therefore, can only be made by finding evidence of the presence of the parasite by a careful examination of the fæces for the ova, and in the case of the bothriocephalus latus of segments of the parasite.

Although the condition of the blood in pernicious anæmia and these parasitic diseases may be identical, there is a marked contrast in the condition of the viscera in fatal cases. In pernicious anæmia a very great excess of iron is found in the liver and spleen; in the anæmias due to the bothriocephalus latus and anchylostomum duodenale there is no such excess of iron. The fact that the condition of the blood is almost identical in these diseases I consider to be an important point in support of the view that pernicious anæmia is due to a hæmolytic process brought about by a toxic infection of the upper part of the intestinal tract. In pernicious anæmia the blood is destroyed by the toxine and the iron is deposited in the liver and the kidneys, in bothriocephalus latus and anchylostomum duodenale the blood is abstracted from the upper part of the intestinal tract by the parasites and is made use of by them, so that there is no iron to be carried off to these organs. In one case the blood is destroyed, in the other abstracted, but the change takes place in the same part of the body in both cases.

Chlorosis may be, but is not usually, mistaken for pernicious anæmia, for the changes in the blood in the two diseases are quite different. In a well marked case of chlorosis the blood is pale, very fluid and thin, and rapidly coagulates. The specific gravity is diminished. The hæmoglobin is reduced much more in proportion than the number of red blood corpuscles, so that the colour index is usually a good deal below 1.

The average number of red blood corpuscles in 77 cases examined by Cabot was 4,050,000, and in 63 cases examined by Thayer 4,096,544.

The red blood corpuscles very rarely fall below 3,000,000 to the cubic millimetre. The average percentage of hæmoglobin in Cabot's cases was 41·2 and in Thayer's cases 42·3. The average colour index of Cabot's cases was ·5.

There may be a considerable amount of alteration in the general size and form of the red blood corpuscles. The average diameter of the red corpuscles may be below the normal, *e.g.*, 7 to 6·5 μ.

Microcytes are usually in excess, but in very severe forms of the disease a large number of macrocytes may be present. Many of the red corpuscles are paler than normal. Nucleated red corpuscles are not usually found, except in severe and advanced cases, and when found they are almost always normoblasts.

The blood plates are increased. The white blood corpuscles are not as a rule increased. In 76 cases examined by Cabot the average number per cubic millimetre was 7,485. Thayer's average was 8,467.

The lymphocytes are often slightly increased and so also are the eosinophiles.

Lorrain Smith states that the actual volume of blood is increased in chlorosis, the apparent loss in hæmoglobin being due almost entirely to an increase in plasma.

I have a typical case of chlorosis under my care at the present time. The patient is a girl, aged 18, who was admitted on April 16th for fainting fits, restlessness and vomiting. She is a pupil teacher and has been under bad hygienic conditions. There has been no loss of blood to account for the anæmia. She was extremely anæmic and dyspnœic on admission.

Hæmic bruits and a bruit de diable were heard. The urine was normal. There was no evidence of primary disease of the lungs, liver, spleen or any other organ. The blood was examined on April 17th; it was very pale and rapidly coagulated.

Red blood corpuscles... ...	3,000,000	
Hæmoglobin	28	per cent.
White blood corpuscles ...	16,000	
Small lymphocytes	23	per cent.
Large lymphocytes	9	"
Polymorphonuclear cells ...	61	"
Eosinophiles	6	"
Basophiles	1	"

She was ordered full diet, with three eggs a day, watercress with her tea, and the following mixture—

℞ Tr. Nuc. Vom. ... ... ℥v.
Tr. Cinchonæ Co. ... ... ʒss.
Aq. Chloroformi ad ... ... ʒi.
And ℞ Ferri Alginati gr. v. in cachet.

On the 23rd the dose of iron was increased to gr. viii.

On the 27th the blood examination showed—

Red blood corpuscles ...	3,300,000	
Hæmoglobin	35	per cent.
White blood corpuscles ...	9,687	

On the 30th she had stomatitis.

On May 10th the blood examination showed—

Red blood corpuscles ...	3,875,000	
Hæmoglobin	50	per cent.
White blood corpuscles ...	12,500	

The leucocytosis was accounted for by some suppuration under the nail of her right big toe.

The changes of the blood are characteristic of chlorosis.

There is another form of secondary anæmia which is not infrequently mistaken for pernicious anæmia, and that is the anæmia which results from carcinoma of the stomach. There is an interesting account of the blood changes in carcinoma of the stomach given by Osler and McCrae in their monograph on Diseases of the Stomach. Accurate counts were made in 59 cases. The average number of red blood corpuscles per cubic millimetre was 3,712,186. The highest count was 6,600,000 per cubic millimetre and the lowest 1,168,000. The high count was explained by the presence of persistent vomiting. There was moderate poikilocytosis. Normoblasts were found, but never a typical megaloblast in any of the cases.

In 52 cases the average percentage of hæmoglobin was 49·9.

The average colour index was 0·63. In 29 of the cases there were less than 8,000 white blood corpuscles to the cubic millimetre. The lowest count was 3,300. The highest count was 28,000.

The differential counts showed an average of 81 per cent. of polymorphonuclear cells. In no case was a myelocyte found.

You will see from these careful observations on the blood in carcinoma of the stomach that a careful blood examination should enable you to exclude pernicious anæmia. Note in the anæmia of carcinoma of the stomach the comparatively large number of red blood corpuscles, the reduction of the percentage of hæmoglobin to a lower degree than the percentage diminution of the number of corpuscles, the consequent low colour index and the absence of megaloblasts.

I have recently had under my care a patient aged seventy-two who was suffering from severe anæmia which was diagnosed as pernicious anæmia.

An abdominal tumour was felt on the left side of the abdomen and was considered to be an enlarged spleen. A blood count at once showed that he was not suffering from pernicious anæmia, *e.g.* :—

Red blood corpuscles 4,400,000 per cubic mm.
Hæmoglobin ... ... 38 per cent.
White blood corpuscles 5,000
Small lymphocytes ... 15 per cent.
Large Lymphocytes ... 5 "
Polymorphonuclear cells... 77 "
Eosinophiles ... ... 2 "
Myelocytes ... ... ?1 "

A physical examination of the abdomen revealed a large tumour on the left side which presented the characteristic features of an enlarged kidney and which I considered to be carcinomatous. Subsequent events show that the tumour is most probably a carcinoma of the colon.

The anæmia produced by direct losses of blood may possibly simulate pernicious anæmia. Mr. Steward and I have an interesting case of this nature in Bright ward at the present time. He is a man, æt. 32, and was sent to me on account of his anæmia, dyspnœa and palpitation. He was very pale indeed and looked as if he was suffering from pernicious anæmia. The blood examination was as follows—

Red blood corpuscles 2,950,000
Hæmoglobin ... ... 22 per cent.
White blood corpuscles 12.187
Small lymphocytes ... 12 per cent.
Large lymphocytes ... 9 "
Polymorphonuclear cells 71 "
Eosinophiles ... ... 7 "
Myelocytes ... ... ?1 "

The large number of leucocytes was probably due to a digestion leucocytosis, and the anæmia was due to long-continued and severe hæmorrhage from internal hæmorrhoids.

I have under my care in Clinical ward also a case of anæmia secondary to losses of blood. The patient is a woman, æt. 48, who was sent to me as a case of myxœdema. She certainly has the typical appearance of myxœdema, although all the classical signs of the disease are not present. She is markedly anæmic and at first I thought the anæmia was in some way connected with the myxœdema. We, however, found that she had been suffering from severe and prolonged uterine hæmorrhages, and there is little doubt but that the anæmia is the direct effect of these losses of blood. The result of the blood examination was—

Red blood corpuscles 3,435,714 per cubic m.m.
Hæmoglobin ... ... 45 per cent.
White blood corpuscles 7,857
Small lymphocytes .. 12 per cent.
Large lymphocytes ... 10 "
Polymorphonuclear cells 72 "
Eosinophiles ... ... 6 "

The specific gravity was 1047.

There was marked poikilocytosis and a good many macrocytes and microcytes were seen on examining films.

These two cases show the typical changes which result from direct losses of blood.

Spleno-medullary leuchæmia might at first sight be mistaken for pernicious anæmia, especially if the spleen happened only to be moderately enlarged. A blood examination, however, would at once make the diagnosis clear.

The blood may be very pale or it may resemble a mixture of pus and blood; it flows and coagulates slowly. The most characteristic feature is the enormous increase in the number of white blood corpuscles and the large proportion of myelocytes present. The red blood corpuscles are diminished in number—in the 34 cases examined by Cabot the average was 3,120,000. The hæmoglobin is reduced in amount in very nearly the same proportion as the red blood corpuscles, so that the colour index is as a rule normal.

Normoblasts and megaloblasts may be present in large numbers. The white blood corpuscles are enormously increased. In Cabot's cases the average was 438,000 to the cubic millimetre, his highest count was 1,072,222 and his lowest 98,000. The average ratio of white to red was 1 to 7, the highest 1 to 2, and the lowest 1 to 200. The normal number of white blood corpuscles to the cubic millimetre is usually 8,000.

The differential count of the white corpuscles showed the presence of a large number of myelocytes with a diminished percentage of lymphocytes and polymorphonuclear cells. Cabot gives as an average—

Myelocytes	37·7
Eosinophiles	4·4
Polymorphonuclear cells ...	49·2
Lymphocytes	7·6

The enormous percentage of myelocytes is the most characteristic feature of the blood changes in this disease. The blood plates are increased. Charcot Leyden crystals may be also found.

I have recently had a typical case under my care in John ward. The patient is a man, aged thirty. He was admitted on March the 5th for weakness and pain in the left side. He was very sallow and anæmic looking. His spleen was enormously enlarged, the lower border of it reaching to a point midway between the umbilicus and pubes.

Several blood-counts have been made, the first on March 5th.

Red blood corpuscles	2,803,000
Hæmoglobin	40 per cent.
White blood corpuscles	375,000
Myelocytes	40 per cent.
Lymphocytes	7 "
Polymorphonuclear cells and eosinophiles ...	53 "

On April 6th I examined the blood and the result was as follows:—

Red blood corpuscles	3,000,000 per cubic mm.
Hæmoglobin	42 per cent.
White blood corpuscles	300,000 per cubic mm.
Myelocytes	43 per cent.
Polymorphonuclear cells	49 "
Lymphocytes, large ...	2 "
Lymphocytes, small ...	2 "
Eosinophiles	3 "
Eosinophilic myelocytes	1 "

Lymphatic leuchæmia is a rarer form and is accompanied by enlargement of the lymphatic glands. The spleen may or may not be enlarged but it never reaches the enormous size that is found in the spleno-medullary variety.

The red blood corpuscles are diminished in number; in Cabot's cases the average was 2,730,000.

Nucleated red blood corpuscles are rarely present, a striking contrast to what is found in the spleno-medullary form. The white blood corpuscles are increased in number, but never to the extent that they are in spleno-medullary leuchæmia. In Cabot's cases the average was 141,000. The relation of white to red was 1:40 (1 to 7 in the other form).

The lymphocytes are enormously increased, forming usually over 90 per cent. of the total number of white corpuscles. The average count in five cases of Cabot was—

Lymphocytes	95·9 per cent.
Polymorphonuclear cells ...	3·04 "
Myelocytes...	0·7 "
Eosinophiles	0·36 "

In early cases of Hodgkin's disease the blood is practically normal. There is no possibility of mistaking this disease for pernicious anæmia, the enlargement of the glands being a condition which is not found in pernicious anæmia. In advanced cases the red blood corpuscles are diminished in number and so also is the hæmoglobin, the latter usually showing a much greater diminution than the former, so that the colour index is considerably below 1. A few normoblasts may be found. The leucocytes are not as a rule increased, when increased the polymorphonuclear cells are found to predominate.

The patient who was recently under my care in Clinical was a man, æt. 36. He was admitted for multiple swellings in the groins and axillæ, and for a curious mental condition. There was no marked enlargement of either the liver or the spleen. He appeared to be moderately anæmic. A blood examination showed—

Red blood corpuscles	... 4,000,0000
White blood corpuscles ...	12,000

The hæmoglobin was not estimated.

Films did not show any changes in the red or white cells.

I am afraid I have left very little time to talk to you about the treatment. I shall confine myself to the discussion of two points. (1) The treatment of pernicious anæmia with anti-streptococcic serum; (2) The treatment of chlorosis by alginate of iron.

Hunter has recently reported to the Medico-Chirurgical Society a case of pernicious anæmia treated with injections of antistreptococcic serum, and I have already alluded to his views

on the nature of this disease. Oral and intestinal antisepsis was carried out and several injections of antistreptococcic serum were given, arsenic being withheld. The result of five weeks' treatment was very striking, there being an increase of 37 per cent. of hæmoglobin and 40 per cent. of red blood corpuscles. The case in Miriam ward has not been treated with the serum but has improved very much with arsenic and creasote, the latter in the form of keratin coated tabloids. The capsules were coated with keratin in order that they might get into the duodenum before being acted on by the digestive fluids. She has not been treated at present with injections of antistreptococcic serum as we wished first of all to gauge the effect of the creasote and arsenic. It is interesting to note that there is an indication for the use of antistreptococcic serum as streptococci have been found in the cultures taken from the pus, which welled up round the teeth when the gums were pressed.

And now with regard to the alginate of iron. Its use in the treatment of anæmia was suggested to me by Dr. Peake. I have found it well tolerated in all kinds of cases. I have never found it cause any gastric disturbance. I have recently treated a case of severe anæmia resulting from profuse hæmatemesis due to a gastric ulcer, ten-grain doses in cachets being administered three times a day, and the treatment was commenced three or four days after the cessation of the bleeding. The patient in Miriam ward who suffers from chlorosis has been treated with eight-grain doses three times a day. It can be prescribed in the form of pills, in cachets, or in a mixture if made up with spiritus ammoniæ aromaticus.

The alginate of iron has the property of passing through the stomach unchanged. It is tasteless, it has no astringent action on the intestine, it does not produce constipation, and it has a sedative action on the mucous membrane of the stomach. I consider it a most useful preparation of iron. The formula of Alginate of Iron is $C_{76}H_{77}Fe_3N_2O_{22}$. It contains 10·97 per cent. of iron. It is prepared by decomposing ferric chloride with sodium alginate, both being in solution. Alginic acid is a new organic acid which is obtained from algæ.

I have purposely avoided the mention of any names in connection with this preparation of iron, as I cannot allow any laudatory remarks I have made to be used in any way as a trade advertisement. The patient who has been taking this form of iron has improved very much. Her altered appearance for the better, and the increase in the number of red blood corpuscles, and the percentage of hæmoglobin, demonstrate this fact.

I was hoping to have been able to have told you something more about the pathology of these varieties of anæmia, but I see my time is up.

NOTE. — Since delivering this lecture the patient suffering from pernicious anæmia has been treated with injections of antistreptococcic serum. Five cubic centimetres were injected on May 15th, 17th, 20th and 23rd. Another blood examination was made on May 26th, with the following result—

Red blood corpuscles 1,800,000 per cubic m.m.
White blood corpuscles 7,000
Hæmoglobin ... ... 40 per cent.

On the 31st she was sent to a convalescent home. Her general condition was much improved, although the blood-count showed little improvement since the injections were begun. She had no sickness or vomiting. After the first injection she complained of feeling a little unwell and her temperature rose to 100°. On the following day she felt quite well, and the three following injections did not cause her any inconvenience.

On June 17th I saw at my Out-Patients' the girl who had been under my care in Miriam ward suffering from chlorosis. She had just returned from a convalescent home and was looking the picture of health and stated that she felt perfectly well.

Papers by Guy's Men.

Sulphur in the Treatment of Dysentery. By G. E. Richmond, B.A., B.Sc., M.B., B.S. Lond., late of the Imperial Yeomanry Hospital, Deelfontein.—*The Lancet*, 15th June.

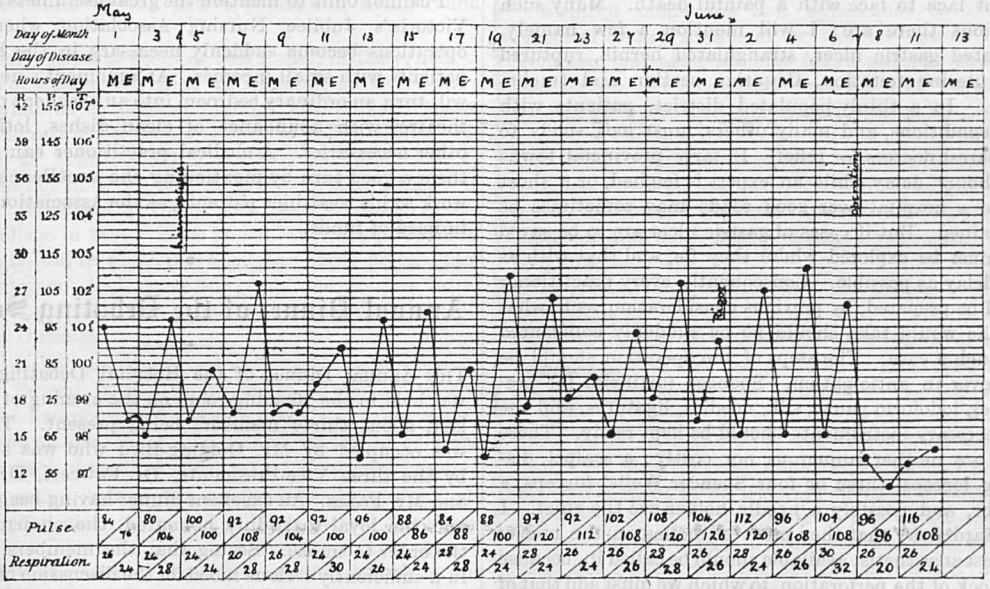
In the Medical Wards.

CASE UNDER DR. PITT.

G.B., æt. 32, was admitted on May 1st, into Stephen, under Dr. Pitt, for wasting. There was no family history of consumption.

Patient was a soldier. He had gonorrhœa ten years ago. In 1890, whilst in India, he had fever "off and on"; he came home in 1893, and during his first year in England he had several attacks of ague, and suffered from cough, shortness of breath, and a heavy pain between the shoulders.

In March, 1900, he coughed up a very small quantity of bright-coloured blood, and, after being examined, he was told that he was suffering from rheumatism and bronchitis, and was discharged from the army.



On admission, he had a good colour, did not appear wasted, and said he felt fairly well. The temperature was 101°, pulse 84, and respiration rate 26. The physical signs were confined to the left lung, and consisted of deficient tactile vocal fremitus at the base, with dulness below the eighth rib, impaired breath-sounds, and wheezy rhonchi on deep respiration. There were no signs of apical phthisis, and the cardiac impulse was half an inch internal to the nipple line.

His condition remained unchanged till May 4th, when he suddenly brought up between two and three pints of bright blood, threw up his arms and went into a fit of convulsions. He became very cyanosed, and lost consciousness for about an hour. Pulse was very rapid and feeble, and his respiration was shallow and frequent, and left pupil was dilated. He was given I.M.H., gr. ¼ stat., followed by Liq. Atropinæ Sulph., mi.ss. Oxygen was also given. There was no recurrence of these symptoms, and no expectoration at all. Later on examination, deficient movement, absent tactile vocal fremitus, complete dulness, greatly diminished vesicular murmur, and voice-sounds were noted over the front of the left chest, and the cardiac impulse was in the nipple line.

A few days after (9th), there was dulness at the base, deficient breath-sounds all over left side, deficient voice-sounds at the left base, and increased voice-sounds above, with ægophony from fifth to seventh ribs. These were the signs behind, those in front remaining unaltered.

On May 15th there was diffuse pulsation over the greater part of the left chest in front. No tubercle bacilli could be found in the man's sputum. On the 21st Wintrich's phenomenon was marked in the upper part of the left chest. The blood-count showed—hæmoglobin 35 per cent., red corpuscles 2,400,000, and white 13,500.

The chest had been several times explored over the dull areas, and on one occasion, the 24th, some blood-stained serum was obtained, and in this Mr. Pakes found pneumococci.

On 31st he had a rigor lasting fifteen minutes, with restlessness and marked anxiety on his own account, and the following day the hæmoglobin was found to have fallen to twenty per cent. with a further leucocytosis. There was now dulness and absent vesicular murmur over the whole of the left chest. Tactile vocal fremitus also absent.

On June 5th pus was found, and the following day the seventh rib was resected. Patient lost blood somewhat freely, so the cavity was not explored. On the 9th, patient rapidly lost a great quantity of blood from the wound, and became very collapsed. He was given I. Strych. Hyp. mv. and intravenous injection of saline three pints.

Since then patient has frequently lost blood both by mouth and operation wound. C. A.

Surgical Operations in General Practice.

THE above title covers—it is to be feared—a multitude of sins, but there are times when a patient's sole chance of recovery lies in prompt action without waiting for highly-skilled aid or without injuring the patient's prospects of getting well by removal to a hospital.

It must be at once granted that many patients drift into hospital the poorer in pocket and the worse in body because of badly-performed surgery on the part of their family practitioner, who undertook to do for them what he was not able to perform, and the failure has embittered their souls against surgeons all and sundry. However, these facts do not absolve general practitioners from the necessity of being ready at times to face all difficulties and to do the best they can for patients brought face to face with a painful death. Many such conditions there are; I will mention a few namely, perforated gastric ulcer, strangulated hernia, ruptured extra uterine fœtation, Cæsarian section and tracheotomy. In a thinly-populated district, patients with these conditions, and many others, must look solely to the nearest doctors for relief. In large provincial towns a few hours' delay while an expert is fetched, or a short ride to a hospital over good roads may sometimes be entertained. But if cases of gastric ulcer are to be saved they must be explored where they lie, and that with as little delay as possible. Consequently every practitioner should be prepared, by previous consideration, as to what steps he would take should he be suddenly confronted with such a case. The steps of the operation should be gone over in anticipation. Sponges (artificial for preference), iodoform gauze, silk, needles, ligatures, and the few necessary instruments should be kept ready. These latter are neither numerous nor costly; a scalpel, dissecting forceps, three or four Spencer Wells' forceps, a director, and possibly a needle holder are the chief. I need hardly say that they must be boiled in the house. The best anæsthetist available should be called in, because the shock of the perforation, to which we must add that of the operation, are a combination so deadly that no considerations of policy or diplomacy should hamper us in our selection. A good light must be obtained and a suitable table, high, long and narrow, is a great help. Dishes must be carefully cleaned and sterilized by being mopped out with lotion. The skin must be prepared with ether or liquor potassæ, followed by carbolic or perchloride. The steps of the operation are well described in books, and are outside the scope of this article.

The question of nursing is all-important. Unfortunately it is sometimes impossible to obtain the services either of a nurse who knows anything of abdominal work or of a brother practitioner who has the faintest ideas of strict antisepsis, and one's only consolation lies in the fact that sometimes the peritonæum is very long-suffering. As regards after-treatment, with a little instruction a motherly woman whose heart is in the work, can soon pick up such skilled nursing as the giving of nutrient enemata and the like.

The above is a somewhat scrappy product of recent experience of operation for perforated gastric ulcer, and in another patient of the Cæsarian section. In the former case success was so nearly reached that the venture was fully justified. The parturient patient had gone through a great deal previous to operation and the prognosis was grave to start with.

In such conditions as those mentioned we cannot insist too strongly on the dangers of delay and often the profession are as much to blame in this respect as the patients or their friends.

Frequently the prospects of recovery may be measured by the promptitude with which surgical interference is decided on and carried out. (This of course applies only to general practitioners).

I cannot omit to mention the great usefulness of Queen Victoria's Jubilee Nursing Association when major operations become suddenly necessary in the homes of patients with small incomes. At a moment's notice they will turn an ordinary bedroom into an excellent operating theatre, with abundance of clean dishes, lotions and other necessaries. A medical practitioner can often do them a good turn by mentioning the excellence of their work to his wealthier patients, as the Association is often in need of funds.

Annual Dinner of the Debating Society.

THE Annual Dinner of the Hospital Debating Society was held in the Reading-room on the evening of Tuesday last, about thirty members being present. The chair was occupied by Mr. Golding-Bird who was supported by the three Vice-Presidents, Dr. Fawcett, Dr. Spriggs and Mr. Pakes. An excellent dinner having been enjoyed and the loyal toast duly honoured, the chairman gave the order to smoke. Seeing that the members were not in a sufficiently serious mood for the discussion of weighty matters, Mr. Golding-Bird proposed subjects which lent themselves to treatment in lighter vein. The chairman displayed considerable malicious ingenuity in calling upon members to propose subjects which disagreed with their personal convictions. For instance, a *bon viveur* like Mr. Thompson was called upon to propose that "Public Dinners were wrong and should be abolished," a confirmed batchelor like Mr. Stamm had to contend "That batchelors should be taxed," and a crack shot of Mr. Travers' stamp had to propose "That rifle shooting is not a good national sport."

In the course of a few remarks the Honorary Secretary, Mr. Harrison Griffin paid a tribute to the retiring Secretary, Mr. Stamm.

A vote of thanks to Mr. Golding-Bird, proposed by Mr. Thompson and seconded by Mr. Pakes, brought an enjoyable evening to a close.

Obituary.

Surg.-Capt. Francis Wellford,

M.A., M.B., B.C. Cantab.

Among the many brave men who fell at the recent battle of Vlakfontein, was one whose death will be read of with feelings of sadness by many an old Guy's man.

Surgeon-Captain Francis Wellford was gazetted early last year to the 7th Battalion Imperial Yeomanry, and left home for South Africa in the month of February. He had only just returned from the Straits Settlements, where he owned coffee estates, which for some three years he had spent his best energies in developing. He had, by force of circumstances, relinquished his professional work with the exception of such practice as was required of him by the native population living round him.

His early life was spent at San Remo, in Italy, and at the age of sixteen he came to England to live with a tutor, who was to prepare him for Cambridge. Meanwhile the rest of his family emigrated to Australia. He entered at Trinity College in 1882, and graduated in mathematics in 1885, and in medicine and surgery in 1890–1. He came to Guy's with several others of the same college in 1888. Here he held the various appointments allotted to students, including those of assistant house-surgeon, and house-surgeon, and in the latter capacity he served that much beloved surgeon, Arthur Edward Durham.

After acting as *locum tenens* at Lyss, in Hampshire, he went to Bowsal, in New South Wales, to visit his family, whom he had not seen for twelve years, and subsequently passed on to Winton, in Queensland, where he held the appointment of medical officer to a government hospital.

His practice in this place was varied and eventful. He lived in the most ascetic simplicity, almost friendless, and with no one to help him in his labours. He acquired some skill as a surgeon, though frequently having no one to administer anæsthetics but the local clergyman. And many a time, on a young horse he had broken in himself, would he ride miles into the bush to find his visit was too late to save life.

After a few years the exile was too much for him, and in 1895 he left Winton for the Straits Settlements, to be in touch with his twin brother, who was in the colonial service at Penang. Shortly after this his life was saddened by his brother's death, and such was their attachment to one another that many of his friends said he never got over it. In these parts he acquired a grant of land, and laid out coffee plantations on the Klangore River. In 1900, last year, he came home for a short visit, leaving a manager in charge of his estates, and while at home he was offered and accepted the post of Surgeon-Captain in the Imperial Yeomanry, and it was in this service that he came to be present with the forces in the recent fighting in the Transvaal.

In his short life of thirty-eight years he had lived much. It was only a few years back that he narrowly escaped being trampled to death by an elephant, an account of which appeared in the GUY'S HOSPITAL GAZETTE.

When in Europe mountaineering was his chief pursuit, and as a boy his only pets were snakes. He was of a lovable nature, and possessed a courage and determination that never flinched in the hour of danger. He hated convention to a degree that amounted to eccentricity, but all who ever worked with him will remember well his staunch and unswerving attachment to his professional duties. In his work he was slow but intelligently sure.

And he is honoured in his death.

REQUIESCAT IN PACE.

"MEMORIES" BY A FELLOW CAMPAIGNER.

Wellford made his first appearance at the Field Hospital to get a tabloid or two for one of his sick Yeomen, and after we had found out one another we had a chat. He had been "on the trek" for many a month, riding all day, and often shivering all night with an outpost on top of a kopje. His wardrobe had naturally suffered, and there came a very gentle request for a spare "British warm." His helmet minus its puggaree, a Tommy's tunic picked up at Pretoria, breeches and boots that had done "Yeoman" service, told their own tale.

At first we thought Wellford slow and referred to him touchingly as "poor old Sammy"—his old Guy's nickname—but soon we realised the true nature of the man and, one and all, we learnt to love him. He had the pleasantest manner, the gentlest of voices, and the sweetest of smiles, as he slightly leant forward with hand to ear to catch what was said—for he was a little deaf. He showed great self-sacrifice, never thinking of his own comfort in his absolute devotion to duty, and he never grumbled. At one time it was about one of his trooper's ailments that a discussion was held, at another time the patient was the subject of scrutiny and consultation, at another a modest request for replenishment of a scanty store of drugs was complied with.

We saw a good deal of "Sammy" during some months of stirring work with Mahon's Mounted Infantry Brigade. In some such way as this we may have voiced our thoughts of him: "Why is this man here? He is too good for it; he is not suited for it; God bless me, he ought to be at home! He wants loving; he wants 'mothering'; he wants a comfortable fireside." And yet he never shirked one jot of his work, never grumbled, and cheerfully chewed hard biscuits by day, and shivered in scanty blankets by night. His sincerity, his little confidences, his absolute unselfishness—he would give cheerfully to you, unknowing, his last pipeful of Dutch tobacco—all these had to be appreciated to make you realise the lump in one's throat when one calls up in imagination that night at Vlakfontein when, after many more months of weary trekking—for it was as far back

as August of last year that we met him—"Sammy", shabbier perhaps, but still cheerful, still uncomplaining, was riding with the yeomen of the rearguard when death and destruction reached them out of the burning veldt. A few moments more perhaps of hard work, of kindly help and kindly smile for others, of pain relieved and comfort bought, and then came his moment of pain - may it have been short—and we read that which conveys so little to the many, so much to the few, that "Surgeon-Captain Francis Wellford died of wounds."

W. S.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

London Diplomates and the London University.

SIR,—My plea has, all along, been in favour of a representative University for London, large enough to absorb or to recognise, in itself, the much older diploma-giving Colleges of Surgeons and Physicians, with their examinations slightly altered to the level necessary for a pass degree. Moreover, this would be historically correct. It would not be proper to labour your columns with the apparatus of history, but, concisely put, at the founding of the Paris University, Remegius d'Auxerre read lectures in A.D. 900; both these and the licences of some prelates were accepted in the University course. Somewhat similar circumstances occurred at Oxford a little later in 1119, leaving out of account the discredited Ingulf and Alfredian traditions of origin. These two are archetypal of the other European universities. In the latest examples of all, at the Midland Universities, a similar plan of inclusion is being adopted. So, with some show of reason, London diplomates can surely claim a favoured entrance to a new university. If, on the other hand, the London University again elects to become an exclusive body, and ignores these same suggestions in the London University 1898 Act, the case of the old Greek proverb, "that the half is sometimes better than the whole," will indeed apply to the London diplomates, whose chance of the comfortable satisfaction of being included in the University, with a chance for a retrospective opportunity of entering for a degree would then, for many a long day, be denied them. The abuses and disabilities constantly hurtled and aimed against the medical profession, must, in some measure, it seems to me, be wrought by the incomprehensible chaos of titles and licences, which do not meet with the public confidence nor expectations. In this century they and most of us are tired of the mere "licence," and university towns do not now adopt this standard for their students.—I am, yours faithfully,

"Finis."—ED.] H. ELLIOT-BLAKE.

Notices.

GUY'S HOSPITAL DENTAL SCHOOL.

The following Prizes and Certificates have been awarded:—

SECOND YEAR'S DENTAL STUDENTS.—Prize (£15) to Mr. H. C. Visick. Messrs. J. B. Barron and A. H. Bell, (equal) Certificates.

FIRST YEAR'S DENTAL STUDENTS.—Prize (£10) to Mr. H. T. Binns. Mr. W. C. Lyne, Certificate.

PRIZE FOR PRACTICAL DENTISTRY.—Messrs. H. T. Binns and W. E. Griffin, equal, £5 each. Certificate to Mr. E. E. Lacey.

THE SOCIETY OF MEDICAL PHONOGRAPHERS.

THIS society will hold its next annual shorthand examination early in May, 1902. Two prizes will be offered, each of the value of £5, one for first year students and one for students of more than one year's standing. The competition will be open without entrance fee to any registered medical student in the United Kingdom who has not taken a first prize at one of the society's previous examinations. It will be held simultaneously in London, Edinburgh, Dublin, and at any provincial medical centre in the United Kingdom at which not fewer than three candidates shall offer themselves. Intending candidates should send in their names as early as possible to Dr. P. G. Griffith, Bonhams, Hayward's Heath, Sussex, who will furnish them in return with a detailed prospectus of the examination. The latest date for receiving entries will be April 15th, 1902.

Medical Department of the Navy,
Admiralty,
Northumberland Avenue, W.C.,
1st June, 1901.

An Examination of Candidates for entry into the Medical Department of the Royal Navy will be held on the 5th August next, and following days, at Examination Hall, Thames Embankment.

Not less than Fourteen Commissions, as Surgeon, will be offered for competition.

The forms to be filled up by Candidates will be supplied on application to this Department.

H. F. NORBURY, Director-General.

NOTICE TO CORRESPONDENTS.

The Editor wishes it to be understood that no communications can be inserted which are not guaranteed by the name of the sender. All articles must be written on one side of the paper only.

Passim.

On Monday next, the 24th inst., the annual election will be held to fill the vacancies on the Council of the Royal College of Surgeons caused by the retirement in rotation of members of that body. Guy's Hospital has had no representative on the Council since the death of the late Mr. Davies-Colley, but on this occasion we have a candidate in the person of Mr. R. Clement Lucas who can rely on the support of the large body of Guy's men who are Fellows of the College.

At the end of the current year Mr. Lucas will become our Senior Surgeon, and he has for many years taken a prominent place on the Staff of the Medical School as Lecturer in Anatomy, and more recently in Surgery. There has always been keen competition for the dresserships on his "firm," while his house-surgeons have been reckoned especially fortunate. Most of the latter have, in due course, gained the distinction of the Fellowship and will no doubt be glad to elect Mr. Lucas on the Council. Guy's men in general, and the "Leucocytes" in particular, wish their candidate every success.

On Saturday, 15th, the nurses and sisters of Guy's enjoyed the hospitality of the Right Reverend Lord Bishop of Rochester and Mrs. Talbot at the Palace, Kennington Park. In order to do so, many must have sacrificed precious hours of sleep, for we noticed that most of the night staff were present.

The Rugby and Association Football teams dined at the Criterion Restaurant on Saturday, 8th instant, as the guests of their President, who was unfortunately unable to preside himself. The toast of Mr. and Mrs. Jacobson was enthusiastically received, as was also that of "William." Other toasts were of a more or less informal character, and were productive of rhetoric of varied style, but general excellence.

The *Hospital* of June 15th published a special "Hospital Sunday Supplement," which put before the public in a clear and straightforward manner the requirements of the London Hospitals, and the causes of the heavy expenditure which many of the older institutions have been obliged to incur.

In many cases new hospitals are gradually replacing the old, without any cessation of the work of healing and succouring the sick. New treatment and more efficient nursing have raised the average cost per in-patient from £5, which it was some ten years ago, to £5 10s. at present. At the same time the period of residence has been remarkably decreased, so that the number of in-patients treated has increased by 33 per cent. per annum, while the stay of the working man in the wards has been curtailed by sixteen days, which means a saving of as many days' pay for his family.

Towards the cost of the London Hospitals, as the *Hospital* graphically puts it, the "Dead-hand" contributed 10s. 2d. out of every £1 received, the "Living" gave 8s. 7d., while the patient paid 1s. 3d. This shows that, although the people of London make use of the voluntary hospitals in far greater numbers than the population of any other town of the United Kingdom, they are satisfied with paying under half their total cost, and are content to trust to the benevolence of past generations to supply the deficiency. If this fact could be brought home to the citizens of the richest city in the world they could by combined effort, easily rid the hospitals of the incubus of debt which threatens to cripple their work, at the same time demanding from the various managements strict attention to economy and an honest account of their stewardship.

In order to catch some of the crumbs which a display of public generosity on Hospital Sunday might be expected to scatter, an anti-vivisection society circulated an advertisement in the daily papers of the 14th inst., urging the contributors to the Fund to withhold their gifts from the chief London Hospitals. These Hospitals, among which we are proud to have

been numbered, are decribed as being provided with "laboratories (*i.e.*, torture chambers for animals) where at a great expense vast hordes of animals are daily and painfully experimented on." With this lurid picture in our minds we were not surprised to meet a "horde" of cattle and sheep being stealthily driven along Great Dover Street on Thursday evening. We concluded that this must be the daily supply for our torture chambers on Friday, but discovered on enquiry that they were on their way to the Deptford abattoirs. Since then we have looked in vain for these vast hordes, although we must confess that an extern told us they were daily gathered from the Charity; while one of the dressers in the front hinted that he had done a little painful experimenting on his own at a great expense. The advertising society "appeals to the public for aid." We should suggest a combination with kindred and equally useful societies. They could then fund the money extracted from the public pocket for an annual prize for the "Greatest Effort of Imagination."

WE quote the following from one of our evening contemporaries, which is noted for its keenness in setting other people right. "The other day a doctor wrote an article in one of the medical papers on 'Bursitis' in an unusual position. He described the inflammation as being in the 'metatarso-laryngeal joint.' As this means the joint between the throat and the middle part of the *hand* most people will agree that the disease was in a very unusual position. Doubtless the doctor is still wondering how it got there." A very Daniel, this evening critic! But he should be certain of his facts before he babbles of things anatomical. We, too, are still wondering how the *tarsus* got into *the hand*. Possibly our brother scribe is the happy possessor of a relic of his Darwinian ancestry, and being gifted with a prehensile foot uses it as a quill driver and calls it a hand.

THE Athletic Club will hold their Annual Sports at Honor Oak Park on Wednesday next, 26th inst. The ground is in good condition, and, given fine weather and a good attendance, the meeting should be of more than average interest. The entries are well up to those of previous years, the donkey race being especially popular. We regret that the Staff have been unable to find one of their number willing to train down to the weight limit for this event, as last year's winner has decided to rest on his laurels. Mrs. F. J. Steward has kindly consented to distribute the prizes, and the committee anticipate a large attendance of Guy's men and their friends.

AT an Extraordinary General Meeting of the United Hospitals' Athletic Club, held on Friday, 7th inst., it was decided to abolish the old method of scoring points at the Annual Athletic Meeting. In future, a "first" will count ten points, and a "second" three points, so that the hospital represented by a good all-round team will have a better chance of competing for the shield. This is as it should be, for under the old system, when only "firsts" counted, it was possible for a school represented by one "crack" to beat one which relied on the efforts of a number of good men. The old system does well enough for a competition between two clubs, but when a number are competing it becomes manifestly unfair. The object of the United Hospitals' Club is to foster general excellence in sport, and the alteration in the rule should give a great stimulus to hospital athletics.

THE Annual United Hospitals' Athletic Meeting will be held at Stamford Hill on Wednesday, 17th July. We give this timely notice so that Guy's men may attend in strong force. Nothing encourages a man so much as the presence of his friends, nothing is so dispiriting as a beggarly attendance. And this year we must recapture that shield!

OF the many Guy's men who have been engaged in South Africa, either as combatants or members of the hospital staffs, no one has gained more rapid promotion than Captain A. F. A. Howe, who has lately returned from the front in command of the Sussex Active Service Company, which consisted of contingents from

the 1st and 2nd Volunteer Battalions of the Royal Sussex Regiment and the 1st Cinque Ports Rifle Volunteers.

CAPTAIN HOWE took the L.D.S. diploma from Guy's Hospital in 1896. He left England as junior subaltern of the Sussex Company in March, 1900, and he has by quick stages reached the position of "Temporary Captain in the Army, attached to the Royal Sussex Regiment." He did good work in Africa as a Railway Staff Officer, and subsequently on the Staff of General C. Knox, while, in his professional capacity, we learn that he was frequently able to render valuable assistance. One of the many lessons which the War Office has learned during the present war has been the value of a few dental surgeons on the Staff of the Army General Hospitals, so that a fighting dentist must have been a most useful man. We congratulate Captain Howe on his successful campaign and his safe return.

IT was almost like being present at the autopsy of an old friend to watch one of the Maze Pond trees being dismembered with a cross-cut saw. Its companion has now followed, and our little oasis in the Borough is shorn of two of its finest members. The vacant section at the corner of St. Thomas's Street and Great Maze Pond originally belonged to St. Thomas's Hospital, and one part of it consists of an old time burial ground. It was leased by Guy's, and the stables of the late Treasurer stood thereon. Now it has been sold, and we are to have a boot factory as our neighbour. One cannot but regret that our resources would not permit of this piece of ground being acquired by the Hospital, so that it could have remained an open space, with its old trees to brighten the dinginess of our surroundings.

ON Wednesday, July 10th, the Right Hon. Lord James of Hereford, will distribute the prizes to the successful few. It has been decided to invite the guests, as formerly, to join with the Governors, members of the Staff, and Students, in assuming academic costume.

ARRANGEMENTS have been made with Messrs. Ede & Son to supply robes, if previously ordered. The park and hospital environs are already being swept and garnished, and we presume that the "vast hordes of animals," mentioned above, will be carefully secreted in one of the subways, as the new laboratories "(*i.e.*, torture chambers for animals)" are to be thrown open to the public.

MANY old Guy's men, and some of the members of the Junior Staff, will remember Frederick Murray Russell, better known as "George." We learn with regret that he was killed in action at Rhenoster Kop, Reitfontein, South Africa, while serving as a member of the Third New Zealand Contingent. Russell was a very popular man in his time, having the reputation of being a genial, straight-going sportsman. We tender our sympathies to his friends, and beg to assure them that his memory will be honoured by his fellow Guy's men.

THE Patrons of the Hospital have always shown such interest in the welfare of the students that the Council of the Clubs' Union have decided to select one of their number as the President of the Union. The rules have therefore been amended so that a Chairman may be elected from the working members of the Council, while the President will be asked to lend his services on certain red-letter days.

THIS step is in accordance with one of the best traditions of Guy's. The *entente* between Staff and Students which exists among us has ever been a source of envy to the members of other medical schools, and now we wish to extend it to those of our Patrons who will do us the honour of accepting our fellowship.

No worthier name could be found among the list of Patrons than that of Sir Frederick Wills, who has consented to act as President of the Union for the ensuing year. The Council are to be congratulated on their selection, and Sir Frederick will doubtless appreciate the compliment which they desire to pay him.

A Case of Calcareous Degeneration of Mesenteric and Hepatic Hydatid Cysts.

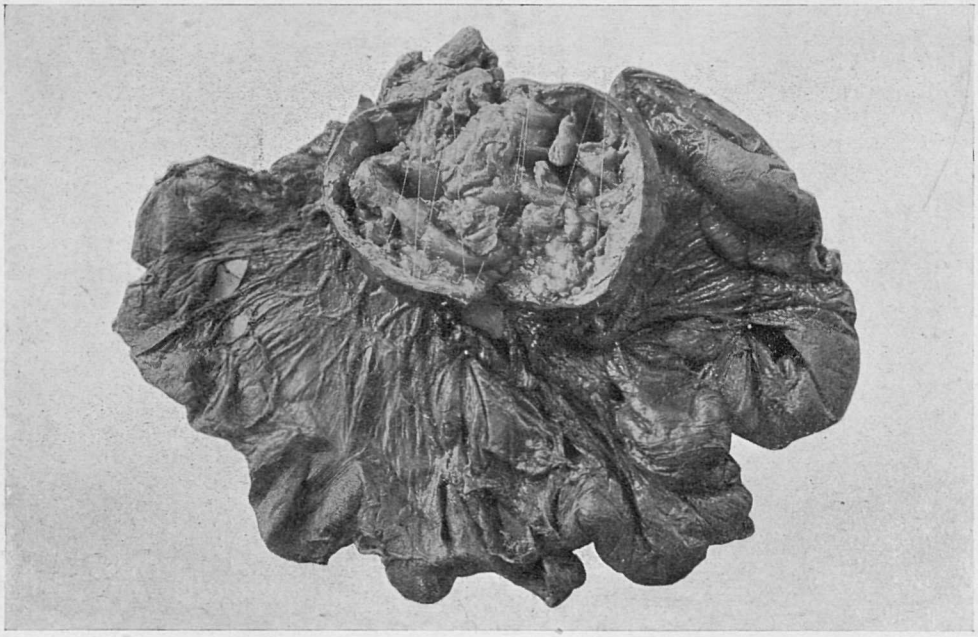
By R. H. JOCELYN SWAN, M.B., B.S. Lond.

J. E., male, æt. 66 years, died of bronchitis in St. George's Infirmary, on December 22nd, 1900. In answer to an application to the medical officer of the Infirmary, it was found that the patient was admitted on December 20th, with severe bronchitis, and in so collapsed a condition that no prolonged medical examination could be made, nor could any clinical history be obtained from him. The patient gave no address, and in the absence of friends to claim the body, it was removed to Guy's Hospital Medical School, under the Anatomy Act, for the purpose of dissection. No enquiries from friends or relations had reached the Infirmary prior to April, 1901, and thus no history can be obtained of the patient before his admission.

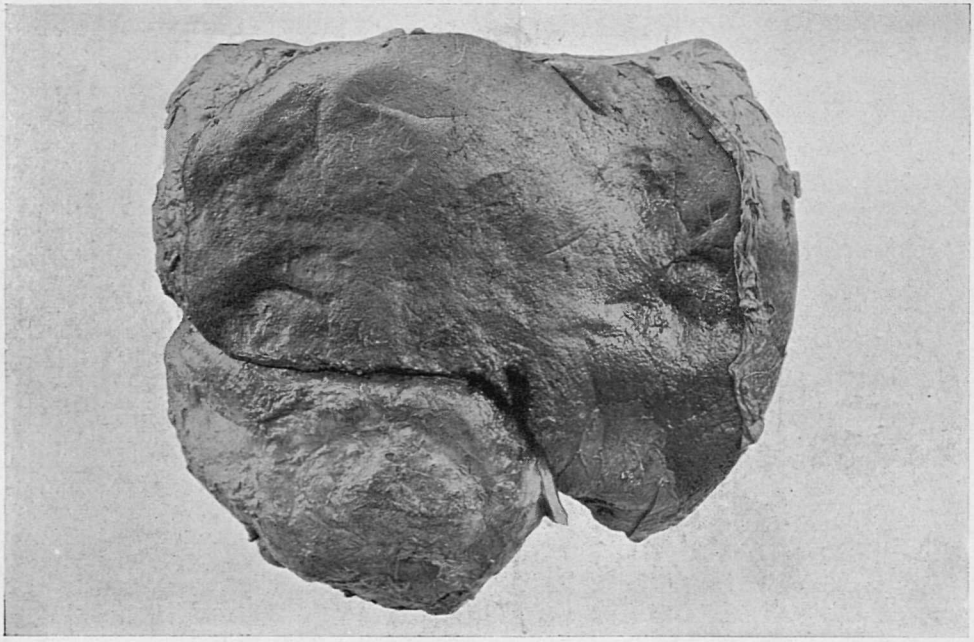
January 28th, 1901. On opening the abdomen in the course of dissection, the coils of intestine were found matted together and to the abdominal parietes by old fibrous adhesions, which also bound down the liver and other abdominal viscera to the neighbouring structures. A mass about the size of an orange was felt in the umbilical area to the left of the median line, and with difficulty the matted intestines were separated from it, numerous small calcareous nodules being found embedded in the adhesions. These nodules varied in size from an eighth to one-half inch in diameter, and were formed of solid, dense calcareous material. On microscopical examination, after treatment with dilute acid, of small pieces of these nodules, a few hydatid hooklets were found. After fully exposing the above-mentioned mass, it was found attached to the mesentery of the small intestine, but whether originating between the two peritoneal layers or from the abdominal surface of one of them, it was impossible to say. The mass was approximately spherical, measuring three and a quarter inches in its longest diameter. The wall was formed in the greater part of thick calcareous plates embedded in dense fibrous tissue, which could be indented, a sense of fluctuation being thereby obtained. The adjacent coil of intestine with its mesentery supporting the tumour was removed intact, and the latter divided by a median section by sawing through its wall—Photograph 1. The wall was then seen to vary in thickness, being greatest in the calcareous areas, measuring in some parts one-third of an inch. The calcareous material was embedded in fibrous tissue, and in the thicker portions seemed to be deposited in successive layers. The inner surface of the wall was covered by a thick, greyish, pultaceous substance. The contents consisted of rounded, semi-transparent, gelatinous masses, between which was a creamy-white substance of a fatty nature. The rounded masses could be easily separated from one another and from the wall, were semi-solid in consistence, contained no fluid nor calcareous material, and were evidently the degenerated remains of daughter cysts contained within the parent cyst. Microscopic section showed these gelatinous masses to be formed of laminated, structureless, but much convoluted material containing numerous hydatid hooklets and a few cholesterin crystals.

On further separation of the intestinal adhesions, similar masses were found, one embedded in the recto-vesical pouch of peritoneum, ovoid in shape, measuring one and a half inches in its long diameter by one inch in the short; another more spherical, of one inch diameter, attached to the gastric surface of the spleen. Both these contained plates of calcareous material in their thick fibrous wall, whilst their contents were exactly similar to that of the mesenteric cyst described above.

Continuing the separation of the intestines, another much larger mass was found projecting from the inferior surface of the right lobe of the liver, extending forwards in advance of the anterior margin of the organ to reach the abdominal wall, and to the left as far as the median line of the body. When later the liver was removed by breaking down the adhesions between it and the diaphragm, the tumour was further examined. Viewed from the superior aspect—Photograph 2—the right lobe of the liver was seen to be considerably reduced in size, being smaller than the left lobe, which was larger than normal. The greater part of the mass was placed in front and below the anterior margin of the liver, but a portion was seen extending backwards beneath the right margin to reach the posterior surface. The hepatic tissue was very adherent to the superior surface of the tumour, any separation between the two being only effected by laceration of the former. From the inferior aspect the mass was found to be placed above the gall-bladder, which thus crossed its anterior surface—Photograph 3—and to be of pyriform shape, bent upon itself, so as to present a concavity looking backwards and to the left, the larger end occupying the anterior part of the inferior surface of the right lobe of the liver, including the quadrate lobe, extending to the longitudinal fissure towards the left and to the transverse fissure posteriorly, leaving the hepatic artery, portal vein and bile-duct unencroached upon. The surface of the left lobe and of the Spigelian lobe appeared normal, except for adhesions, but the posterior surface of the right lobe was nodular and very firm to the touch. A section was made into the liver tissue about one inch to the right of the inferior vena cava, when numerous small cysts, varying in size from one quarter to three-quarters of an inch in diameter, were found embedded in a very firm matrix, which to the naked eye could be seen to consist largely of fibrous tissue. The cysts contained no fluid, but were filled by much folded hydatid membrane, which was very easily detached and which contained numerous hydatid hooklets. No cysts were found in the left lobe of the liver. The inferior vena cava was of normal calibre and the gall-bladder was moderately distended with viscid bile; it was intimately adherent to the inferior surface of the tumour.

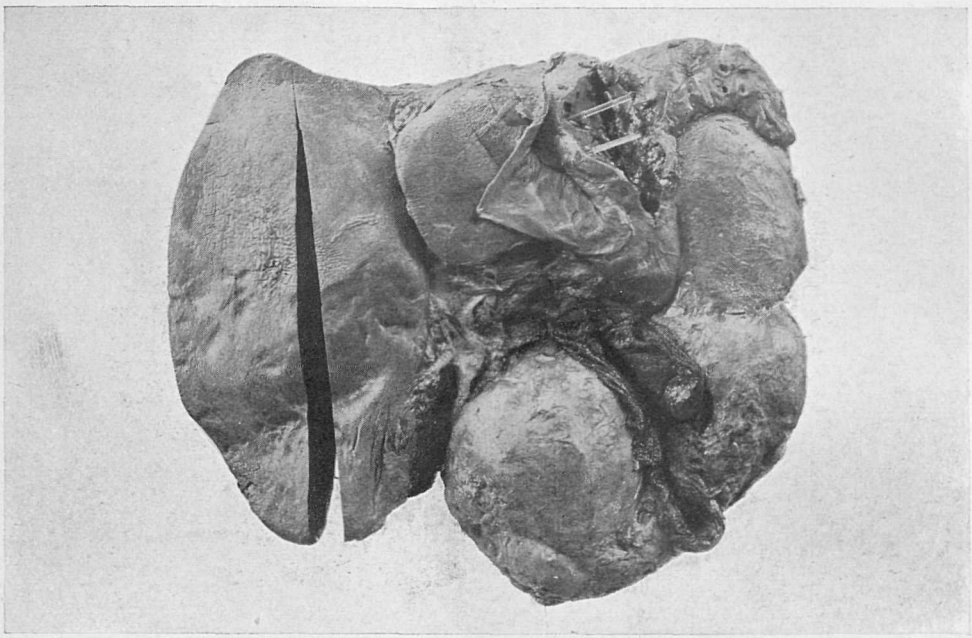


Photograph 1.—The mesenteric cyst laid open to show nature of wall and contents.

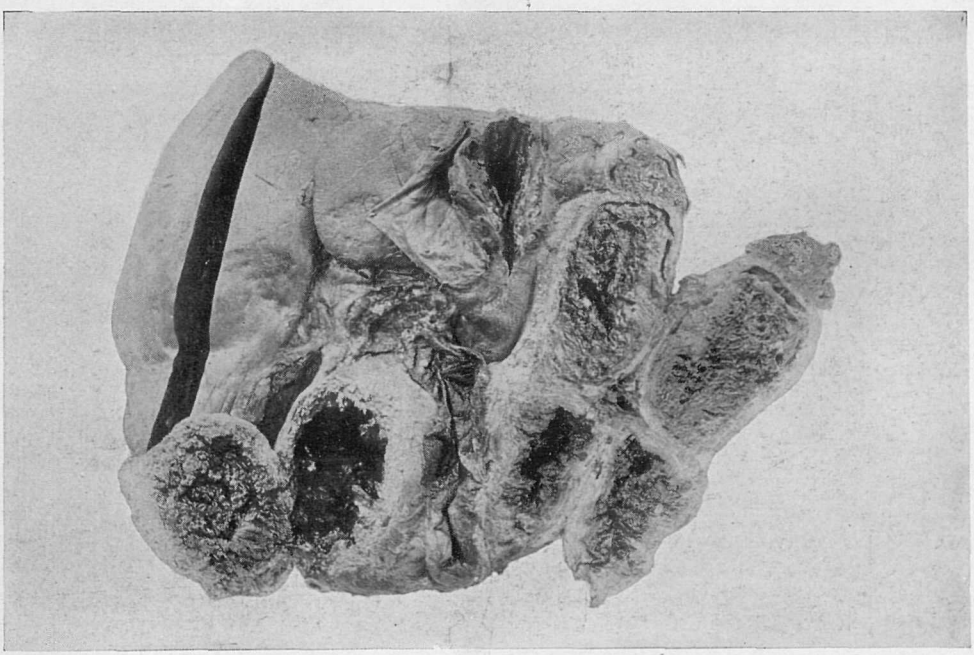


Photograph 2.—The liver, viewed from its superior aspect, with the tumour under the right lobe

A CASE OF CALCAREOUS DEGENERATION OF MESENTERIC AND



Photograph 3.—The liver, from inferior aspect, to show position, etc., of the calcareous hepatic cysts



Photograph 4.—The hepatic cysts laid open, as described in text.

HEPATIC HYDATID CYSTS.—By R. H. JOCELYN SWAN, M.B., B.S. Lond.

The tumour projecting from the inferior surface of the liver was divided by a constriction into two portions, the larger part in front of rounded form and an ovoid, smaller part posteriorly. These two parts presented certain differences, for whereas the wall of the larger part, though consisting in the greater part of calcareous material, could be depressed by the finger in certain areas and fluctuation thus obtained, the wall of the smaller posterior portion was very hard and resisted any attempt at indentation. Thus, from the external appearance, it was thought that the mass in reality was made up of two degenerated cysts, and this proved correct on subsequent incision of the walls. The surface of the tumour was covered by adhesions which united it to the abdominal viscera, but no trace of hepatic tissue could be found on it, though the cysts must have primarily originated in the liver. Measurements were taken—that from the most prominent end in front and behind measured along the convex margin amounted to nine and three-quarter inches, whilst from each end to the centre of the constriction amounted to five and three-quarter inches in anterior part and two and a half inches posteriorly. The mass was then sawn into by means of two incisions, and the raised portions turned back as on a hinge. The first cut passed through the inferior and right aspects of the two portions of the mass by an incision passing upwards and outwards (with the liver occupying its natural position) so as to include a nearly equal amount in front and behind the constriction. The second incision was carried almost horizontally across the most inferior part of the larger anterior cyst. On turning back these flaps, the contents of the two portions were found so different that each necessitates a separate description. The constriction noted on the external surface extended throughout the mass as a thick septum, composed of dense calcareous material bounded on each side by concentric layers of gelatinous, degenerated hydatid membrane and measuring half an inch in thickness. (Photograph 4, with explanatory diagram).

The posterior cyst was regularly ovoid in shape, measuring two and a half inches in long diameter and one and a half transversly. The wall was formed entirely of dense calcareous material varying in thickness from one-third to one-quarter of an inch. The interior was completely filled with a firm, bile-stained, gelatinous mass arranged in a distinctly laminated manner, and contained no fluid. Towards the extreme right the gelatinous contents had undergone a fatty change of a creamy colour and consistence. Elsewhere the contents were closely adherent to the wall of the cyst, there being no clear line of demarcation between them.

The anterior larger cyst, measuring five and three-quarter inches in longest diameter, differed from the above in the nature of its wall and contents. The wall contained much firm fibrous tissue, embedded in which were thick plaques of calcareous material, but much less dense in texture than that in the wall of the posterior cyst, and in places was half an inch thick, lined by gelatinous membrane which was distinctly bile-stained, irregularly deposited, and prolonged as shaggy fringes into the cyst. Some rounded gelatinous remains of daughter cysts were attached to the wall. The contents consisted of thick, semi-gelatinous, brown fluid, in which were floating easily-torn shreads of hydatid membrane, which, under the microscope, were found to contain numerous hydatid hooklets. This fluid was kindly examined by Mr. B. A. Richmond, who has forwarded me the following report:—

The contents of the cyst.—These consisted of a semi-solid jelly, with seed-like bodies embedded in it. On teasing out the jelly it was found to consist of

1. Small intact hydatid cysts.
2. Empty skins (bile-stained).
3. Bile concretions, and
4. A matrix of mucoid material.

1. The small cysts had greyish concretions in their walls. These consisted mainly of calcium carbonate with a trace of phosphate. The cyst walls were insoluble and apparently unchanged after boiling with dilute sulphuric acid. The substance was readily soluble in dilute caustic soda, yielding a brownish solution. This solution after boiling for some time with a two per cent. solution of sulphuric acid yielded a copper-reducing substance. The proteid was found to contain sulphur but no phosphorus. It appeared identical with the mucin derivatives known as hyalogens.

2. The older broken up skins were also insoluble in water and dilute acids, but soluble in alkalies. They yielded a reducing substance on boiling with dilute mineral acids. They consisted of hyaline rather than hyalogen.

3. The biliary concretions consisted of bile pigment with a trace of cholesterin.

4. The matrix consisted of a colloid substance soluble in alkaline solutions and not precipitated by acetic acid and potassium ferrocyanide. Whether true colloid or pseudomucin I could not determine. The jelly treated with water and dialysed yielded crystalloids including chlorides and phosphates. There was no soluble albumen present.

The small portion of the right lobe of the liver behind the main mass through which the first oblique incision passed was very firm to the touch, and distinct strands of fibrous tissue could be seen traversing it. This fibrous tissue was particularly dense immediately around the adjacent calcareous cyst wall. Numerous small degenerated hydatid cysts containing much folded membrane were embedded in this portion of the liver, one divided by the section measuring three-quarters of an inch in diameter (photograph 4). The appearance of these small cysts in proximity to the large one suggests an exogenous formation of them from the latter.

Microscopic sections were prepared by the celloidin method from the posterior part of the right lobe of the liver in the situation of the small cysts. Although some months had elapsed since the death of the patient, these sections show the structure of the tissues remarkably

well, probably owing to the use of formalin in the preservation of the body for the dissecting-room. Contained in the small cysts is a much-folded laminated membrane, typical of hydatid endocyst, enclosing a granular material supporting numerous hydatid hooklets. Immediately surrounding each cyst is a thick layer of fibrous tissue, prolongations from the periphery of which form a network enclosing islets of hepatic cells. These groups themselves show marked interstitial fibrosis, whilst the individual cells have undergone fatty changes. Numerous bile-ducts are seen in section enclosed in fibrous tissue. The striking feature of every section examined is the dense fibrous tunic surrounding every small degenerated cyst, with the general fibrosis of the surrounding liver substance. In sections taken through the liver substance in the right lobe devoid of cysts, but slight fibroid change is found, and in the left lobe the hepatic tissue is quite normal in appearance.

No cysts were found in any other part of the body.

The interest of this case consists not only in the rarity with which such large degenerative hydatid cysts, with so marked calcareous changes, are found, but that it may throw some light on the causation of death of the parasite and its consequent spontaneous cure. Many various theories have been from time to time put forward as to the causation of death of the parasite, of which the chief are briefly :—

1. Natural death of the parasite.
2. Inordinate growth of the internal brood.
3. Absorption of the fluid of the cyst.
4. Irruption or transudation of bile, blood, or urine into the cyst.
5. Malnutrition from diminished blood-supply.

Of the above explanations, some have been shown by Mitchell Stevens to be unsatisfactory for the great majority of cases, though possibly each may explain a few. Thus, in the above order,

1. *Natural death of the parasite.*—There is no evidence to support this theory, as dead hydatids have been found at all stages of development, as in this case, whilst, on the other hand, hydatids have been known to be living after forty years.

2. *Inordinate growth of the internal brood.*—Here again there is lack of evidence that death is due to pressure within the cyst. A large amount of pressure can be borne by the parasite without causing its death, whereas death occurs under very varied pressure in the different stages of development.

3. *Absorption of fluid in the cyst.*—This theory has been put forward in view of the convoluted arrangement of the endocyst found in many dead hydatid cysts, but if this could be the cause of death of the parasite, it would naturally be expected that some puckering of the ectocyst would ensue, but none could be found in the case under notice. "The folding of the endocyst is as easily explained by supposing that changes in the ectocyst have prevented its further expansion, and that the endocyst, still growing, has of necessity become folded." (Stevens.)

4. *Transudation of bile, blood, or urine into the cyst.*—That the bile often found present in hepatic hydatid cysts can account for death of the parasite is negatived by the fact that dead cysts of the liver are sometimes found free from bile, whilst death takes place in situations where no bile could be contained, as in the lung, or, as in this case, in the mesentery and recto-vesical pouch.

That in this case so many dead cysts are found in development varying from those very minute to one over five inches in diameter, and in which death has obviously occurred at different times, at once suggests a causation acting locally, whether in the liver or elsewhere, and can be more easily explained by the next heading :—

5. *Malnutrition from diminished blood-supply*, due in all probability to changes in the ectocyst, rather than to the changes in the cyst-contents, producing death of the parasite. That all the small cysts possessed such a dense coat of fibrous tissue, which by increase or by condensation would occlude the vessels, and that the hepatic cysts were all placed in the peripheral portion of the organ (where the blood-supply would be comparatively poor) all lend support to this view. That those situated in the mesentery owe their death to this cause is explained by the large amount of fibrous tissue surrounding them, not only as the ectocyst, but in the matted adhesions.

The length of time these cysts had been dead cannot be said; but it is obvious from the varying condition of the walls and contents that death occurred at different ages of each. From the thickness and density of the calcareous material in its wall, and from the very firm gelatinous nature of its contents, it is probable that the posterior, smaller of the two large hepatic cysts, succumbed first in point of time, whilst the relatively thin wall and the obvious rounded forms of the daughter cysts contained in those of the mesentery point to death occurring at a later period.

It is difficult to account for the very different contents of the two large cysts of the liver, firm and gelatinous on the one hand, and dark brown fluid on the other. Doubtless both were formed originally in the liver substance, judging from their situation above the gall-bladder, with atrophy and fibrosis of the hepatic tissue covering them, whilst those attached to the mesentery and contained in the peritoneal cavity were in all probability formed by transplantation of the scolices from a leakage or rupture of a hepatic or other cyst, which at the same time set up the peritonitis—a formation proved by Rasmussen. The mesenteric cysts might in part be formed by direct transmission of hydatids into the peritoneal cavity from the alimentary canal during the primary invasion of the body, but this would not account for the diffuse peritonitis which must have existed, nor for the numerous calcareous nodules studded all over the peritoneum, which can be explained on the theory of rupture, though in the absence of clinical history, no dogmatic statement can be made. The presence of a cyst in the recto-vesical pouch favours the theory of formation from transplantation by rupture of a previous

cyst. The numerous small cysts in the liver probably arose by exogenous formation from the large one, death ensuing from malnutrition due to diminished blood-supply consequent upon the increasing fibrosis around them, and thus to changes taking place outside the cyst rather than in the contents. That this fibrosis around the cysts is due to their presence in the liver and not attributable to any concomitant disease, such as cirrhosis, is shown by the normal microscopical appearance of the hepatic cells in the left lobe and of the right lobe apart from the immediate vicinity of the cysts.

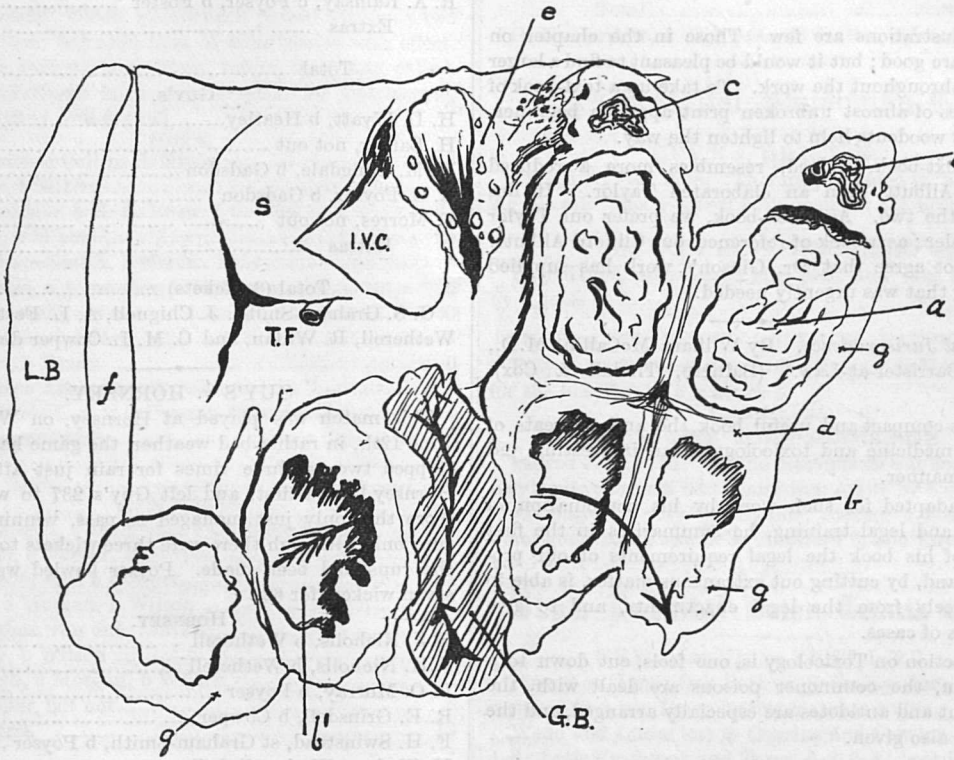


Diagram of Photograph 4.

a The gelatinous contents of the posterior cyst.

bb[1] The cavity of the anterior cyst, through the two openings in which an arrow is passed.

cc[1] Small degenerated cyst with convoluted endocyst.

d The calcareous partition between the cysts.

e Section into right lobe showing small dead cysts with folded endocyst surrounded by dense fibrous tissue.

g. Thick calcareous wall of cysts.

L.B. Left lobe of liver with section into it *f*.

S. Spigelian lobe.

T.F. Transverse fissure of liver.

I.V.C. Inferior vena cava laid open.

G.B. Gall-bladder laid open.

Reviews.

The price of books submitted for review should in every case be stated.

Text-Book of Medicine. Edited by George Alexander Gibson, M.D., D.Sc., F.R.C.P. Edin. Published by Young J. Pentland.

This work, in two volumes of 900 pages each, professes to supply a want in this country. Like several of the newer English text books, it is by many authors; no fewer than thirty-six have contributed to it. Nevertheless, it cannot be objected, as in so many cases of the kind, that the articles differ from each other, in character and excellence, so widely as to jar upon the reader. All are good.

Much greater care could have been devoted to the paragraphs on treatment. These are as short as possible in almost every case; outlines are given, but few of the details filled in. The student is told, for example, that "cardiac tonics" should be administered; but the best tonic to use under different circumstances, the dose to use, the way to prescribe it, how often to give it, are left for him to find out elsewhere. In this respect the book all through is far from perfect. It is not easy to find, in any text-book, a good description of the procedure in dry cupping. In the hope that this small want had been

at last supplied, the index was consulted; the word cupping could not be found at all. There are manuals of treatment; and text-books of medicine; but a text-book of medicine which is at the same time a good manual on treatment has yet to be produced.

There is but one index, which is at the end of the second volume. This is a serious objection to the book; to be compelled to carry both large volumes from place to place, because the first has no index, is a serious matter; however perfect that in the second volume may be, it cannot compensate for the absence of an index in the first.

The illustrations are few. Those in the chapter on malaria are good; but it would be pleasant to find a larger number throughout the work. To take up a text-book of 1800 pages of almost unbroken print appals a beginner. Frequent woodcuts help to lighten the way.

The text-book, indeed, resembles more a reduced Clifford Allbutt than an elaborated Taylor. It lies between the two. As a text-book, we prefer our Taylor or our Osler; as a book of reference, our Clifford Allbutt. We cannot agree that Dr. Gibson's work has supplied anything that was urgently needed.

Medical Jurisprudence. By William McCallin, M.D., B.Ch., Barrister-at-Law. (Ballière, Tindall & Cox). Price, 4s.

In this compact and useful book the author treats of forensic medicine and toxicology in an interesting and concise manner.

Well adapted for such work by his combination of medical and legal training, he summarises in the first section of his book the legal requirements of our profession, and, by cutting out extraneous matter, is able to quote freely from the legal enactments, and to give examples of cases.

The section on Toxicology is, one feels, cut down to a minimum, the commoner poisons are dealt with, the treatment and antidotes are especially arranged, and the tests are also given.

The arrangement, print, and general get up of the book are good, and it should prove useful to the practitioner for reference, and to the student for examination purposes.

Sport.

Cricket.

GUY'S v. BRENTWOOD.

The return match with the above club was played at Honor Oak Park, on Saturday, June 8th. Brentwood went in first, and put together a fairly respectable score. On Guy's going in, the runs were knocked off in very quick time, the whole total taking only about two hours. Barber played a splendid not out innings of 138.

BRENTWOOD.

C. H. Escott, c Barber, b Wyatt	33
R. J. Thornton, c Graham-Smith, b Cowper	19
W. Von Someran, b Foster	2
D. Crossman, b Wyatt	7
Rev. M. Berkeley, b Wyatt	37
A. E. Heatley, lbw, b Poyser	70
A. Gadsdon, b Foster	1
C. E. Lewis, c Langdale, b Wyatt	19
H. W. Ramsay, not out	2
R. A. Usborne, c Graham-Smith, b Wyatt	0
R. A. Ramsay, c Poyser, b Foster	2
Extras	12
Total	204

GUY'S.

H. D. Wyatt, b Heatley	12
H. Barber, not out	138
H. M. Langdale, b Gadsdon	55
R. C. Poyser, b Gadsdon	23
F. Morres, not out	11
Extras	10
Total (3 wickets)	249

G. S. Graham-Smith, J. Chignell, A. L. Foster, M. C. Wetherell, R. Willan, and C. M. L. Cowper did not bat.

GUY'S v. HORNSEY.

This match was played at Hornsey, on Wednesday, June 12th, in rather bad weather, the game having to be stopped two or three times for rain just after lunch. Hornsey batted first, and left Guy's 237 to win, which score they only just managed to pass, winning by five runs only, although there were three wickets to fall when the runs had been made. Poyser bowled well, taking seven wickets for 62.

HORNSEY.

F. J. Nicholls, b Wetherell	6
J. H. Nicholls, b Wetherell	12
P. O. Murray, b Poyser	42
R. E. Grinsdell, b Cowper	3
F. H. Swinstead, st Graham-Smith, b Poyser	24
H. Wade, c Wetherell, b Poyser	69
T. L. King, b Poyser	0
W. P. Harrison, b Poyser	17
W. C. Nimmo, c Collins, b Poyser	9
H. B. Corry, c Wetherell, b Poyser	37
G. Hart, not out	3
Extras	14
Total	236

GUY'S.

H. D. Wyatt, b Murray	15
H. Barber, b Swinstead	59
H. M. Langdale, run out	89
M. C. Wetherell, c Nimmo, b Swinstead	2
R. C. Poyser, b Murray	19
F. Morres, c Corry, b Murray	0
G. S. Graham-Smith, c F. J. Nicholls, b Nimmo	27
E. A. Collins, b Nimmo	7

T. Morgan, not out	0
J. Donnell, b Murray	0
C. M. L. Cowper, b Nimmo	1
Extras	22
Total	241

GUY'S v. EASTBOURNE.

On Saturday, June 15th, this match was played at Eastbourne, Guy's suffering defeat by 33 runs and three wickets. Guy's, on going in first, only put together a moderate total, which Eastbourne passed with only two wickets down; but after this, Wilson bowled with effect, and seven wickets were down before time was called. Collins and Knipe made a long stand for Eastbourne, Collins batting well for 120.

GUY'S.

H. D. Wyatt, c Collins, b Nixon	18
H. Barber, b Nixon	58
H. M. Langdale, c H. S. Bush, b Collins	64
F. Morres, b Nixon	24
G. S. Graham-Smith, b Nixon	0
A. R. Wilson, c Alexander, b Matheson	6
M. C. Wetherell, not out	30
H. R. Grellett, b Nixon	5
E. Morgan, b Nixon	0
J. Booklers, c Alexander, b Collins	2
C. M. L. Cowper, c. Matheson, b Nixon	4
Extras	17
Total	228

EASTBOURNE.

L. G. A. Collins, c Langdale, b Graham-Smith	120
H. S. Bush, c Barber, b Cowper	0
E. Matheson, lbw, b Cowper	24
C. Knipe, c Morgan, b Wilson	92
H. S. Hughes, run out	3
F. B. May, b Wilson	0
F. W. Bush, c Morgan, b Wilson	6
H. Alexander, not out	3
Extras	13
Total (7 wickets)	261

GUY'S 2ND XI. v. ST. BARTHOLOMEW'S 2ND XI.

Played at Winchmore Hill, on Saturday, June 15th, and resulted in an easy win for us by eight wickets.

ST. BARTHOLOMEW'S.

H. S. Ward, c Donnell b Chignell	0
H. B. Hudson, b Chignell	26
V. C. Upton, st Turner, b Chignell	0
E. A. Wright, c Tolhurst, b Bowle	11
T. W. Chaff, b Bowle	1
L. Grey, b Chignell	0
C. H. Fernie, c Donnell, b Norton	16
N. W. Wilson, b Norton	0
S. P. Griffin, b Chignell	11
W. R. Favell, not out	0
Extras	5
Total	70

GUY'S.

H. M. Tolhurst, c & b E. A. Wright	1
T. S. Chignell, c Gray, b C. H. Fernie	43
S. C. Bowle, b E. A. Wright	20
E. L. Norton, b Chaff	20
A. H. Turner, c Sub., b Fernie	57
R. Willan, b Fernie	53
H. T. Palmer, not out	18
E. W. Strange, b Fernie	4
Extras	30
Total	246

G. N. Bartlett, J. Donnell and J. Goss did not bat.

Guy's Hospital Swimming Club.

GUY'S v. GRAFTON.

Played on May 24th. This match ended in a draw of 2 goals all. Moon scored both goals for the hospital.

GUY'S v RAVENSBOURNE.

Played at Southwark on May 31st, and won by Guy's by 5 goals to 3.

GUY'S v. ST. JOHN'S COLLEGE, BATTERSEA.

Played at Battersea on June 7th, and ended in a win for the hospital by 5 goals to 4.

GUY'S v. ST. JOHN'S COLLEGE.

Played June 11th. In the return match at Southwark, Guy's played much better and won easily by 8 goals to 1. Moon played a very good game, scoring 5 goals. The other goals being scored by Ransford 2, and Layton.

Guy's Hospital Lawn Tennis Club.

GUY'S 1ST VI. v. KENT L.T.C.

Played at Honor Oak Park on Saturday, June 8th, and resulted in a win for us by five matches to four.

Wedd and Lucas lost to Cousins and Cousins, 4–6, 7–5, 4–6; beat Westbrook and Terry, 6–2, 6–4; beat Helas and Dunn, 6–4, 7–5. Jupp and Winckworth beat Westbrook and Terry, 6–2, 3–6, 6–1; beat Helas and Dunn, 6–2, 6–1; lost to Cousins and Cousins, 3–3, 9–11, 3–6. Cooke and Davies-Colley lost to Helas and Dunn, 5–7, 6–3, 6–8; lost to Cousins and Cousins, 4–6, 6–2, 6–8; beat Westbrook and Terry, 8–6, 3–6, 6–4.

GUY'S 1ST VI. v. EAST CROYDON.

Played at Honor Oak Park on Saturday, June 15th, and resulted in a win for Guy's by six matches to three.

Jupp and Lucas lost to Brown and Renolds, 8–6, 8–10, 4–6; beat Lahee and Pockington, 6–2, 6–3; beat Hall and Woods, 7–5, 4–6, 7–5. Lacey and Bent beat Lahee and Pockington, 6–4, 6–1; beat Hall and Woods, 6–2, 3–6, 6–2; beat Brown and Renolds, 6–2, 7–5. Holmes and Winckworth lost to Hall and Woods, 6–3, 3–6, 3–6. lost to Brown and Renolds, 1–6, 1–6; beat Lahee and Pockington, 6–4, 3–6, 6–4.

Appointments.

HOUSE APPOINTMENTS.

The following appointments have been made by the House Committee upon the recommendation of the Medical Committee :—

House-Physicians.—Messrs. J. A. Butler (Dr. Taylor); H. S. French (Dr. Pitt).

Assistant House-Physicians.— Messrs. F. G. Gibson and D. Forsyth.

House-Surgeons.—Messrs. F. G. Gross (Mr. Lucas); and F. Curtis (Mr. Jacobson).

Assistant House-Surgeons.—C. H. Glenn and E. C. Bevers (Front Surgery); S. J. Ormond (Mr. Fripp); E. F. G. T. Heap (Mr. Symonds); J. A. B. Hammond (Mr. Lane); P. C. P. Ingram (Mr. Dunn).

Obstetric Resident.—Mr. T. J. Wright (from July 1st).

MEDICAL SCHOOL APPOINTMENTS.

The following appointments have been made by the Medical Council and approved by the House Committee :—

Clinical Assistants.—Messrs. D. G. Greenfield, M. A. Collins, A. C. H. Gray, J. A. Glover, G. Clarke, T. H. B. Dobson.

Clinical Assistants in Medical Out-Patients.—Mr. W. H. Bowen (Dr. Shaw).

Obstetric Dressers.—Messrs. B. Churchill, T. G. Miles, H. A. Cutler, J. A. Andrews (July 1st); J. C. Curtis, A. H. E. Wall, H. Barber (August 16th).

Dressers in the Throat Department.—Messrs. D. H. Trail, F. E. Welchman, J. Evans, C. Tessier, R. Thompson, J. C. O. Bradbury.

Assistant Surgeons' Dressers.—Messrs .W. H. Bush, C. F. Fraser, E. N. Jupp, C. M. Anthony, H. S. Jones, B. I. Rahim (Mr. Symonds); W. F. Box, B. H. Wedd, P. C. V. Bent, J. H. Donnell, W. W. Read, E. W. Strange (Mr. Lane); P. W. Hamond, J. M. Bickerton, F. W. Fawssett, L. S. H. Glanville, E. G. Goldie, R. G. Anderson (Mr. Dunn); B. B. Westlake, J. Braithwaite, H. M. Goldstein, R. E. Brayne, G. L. Buckeridge, T. Morgan (Mr. Fripp).

Medical Ward Clerks.—Messrs. F. C. R. M. Knight, H. E. Morris, F. C. Robinson, G. F. Hardy, H. Johnson, H. S. Brown, H. B. German, C. R. Shattock, H. Ackroyd, A. R. Brailey, J. S. Cooper, T. C. Lucas, D. R. Pike, H. M. Woodward, D. H. Richards, C. H. Dawe, J. Bromley, R. Moyle, A. E. Rowlett, H. W. Bethell, R. Larkin, C. H. Reinhold, H. D. Smart, N. I. Spriggs, H. Watts, F. H. Wallace, J. Goss, E. L. Ward.

Assistant Physicians' Clerks. - Messrs. E. J. Gaffney (Dr. Shaw); A. R. Wilson (Dr. Washbourn); H. C. Winkworth (Dr. Bryant).

Surgical Ward Clerks.—Messrs. P. R. Bolus, F. P. Hughes, C. E. Iredell, P. A. Peall, C. D. Pye-Smith, H. O. M. Beadnell, K. Black, S. C. Bowle, G. Carlisle, F. G. Goble, B. W. Lacey, H. C. C. Mann, E. H. B. Milsom, J. F. Rey, W. T. P. Meade King, P. P. Cole.

Clerks in the Skin Department.—Messrs. R. P. Marshall, A. E. H. Pakes.

Dental Surgeons' Dressers.—Messrs. H. Bentley (July-August); A. Wylie (August-September); F. A. Beattie (September-October).

Clerks in the Electrical Department.—Messrs. R. P. Marshall (July-August); M. W. Cohen (August-September).

Pathological Assistants to Surgical Registrar.—Messrs. P. N. B. Odgers, W. M. Robson.

From the Gazette's Special Pathologist.

NOTICES.

T. D. H., ABERYSTWYTH.—Reaction acid, sp. gr. 1026, albumen, a minute trace; sugar and blood absent; urea, = 4·2 per cent. or 18·37 grains per ounce. Microscopical examination of the centrifugalised deposit: There was a fair quantity of material, consisting of uric acid crystals and bacteria, with a few squamous cells. No pathological elements were detected. NOTE.—This appears to be merely a concentrated urine.

T. E. D. H., REIGATE.—No tubercle bacilli were found in the sputum.

PATHOLOGIST.

Birth.

PAKES.—On June 9th, the wife of Walter C. C. Pakes, D.P.H, etc., of a son.

Marriage.

CLOWES—CHETHAM-STRODE.—On June 12th, at St. Giles's, Reading, by the Rev. Canon Ducat, assisted by the Rev. Ernest Bence, M. A., Ernest Francis Clowes, M.R.C.S., L.R.C.P., of Wotton-under-Edge, Gloucestershire, youngest son of Francis Clowes, J.P., of Sutton Hall, Norfolk, to Elsie Sophie, second daughter of the late Edward Chetham-Strode, Silverwood, Dunedin, N.Z., and Mrs. Moody-Ward, Kendrick House, Reading.

Deaths.

HALL.—On May 28th, at Swansea, James Griffith Hall, J.P., M.R.C.S., L.S.A., Consulting Surgeon of Swansea Hospital, aged 87.

RUSSELL.—On November 29th, 1900, killed in action at Rhenoster Kop, Reitfontein, South Africa, Frederick Murray Russell, Third New Zealand Contingent, son of Captain W. F. Russell, Christchurch, New Zealand.

ED.—F. G. G.

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Notice.

All Communications, Articles, Letters, Notices, and Books for Review, should be forwarded, addressed by the name of the sender, to the Editor, GUY'S HOSPITAL GAZETTE, *Guy's Hospital, S.E.*

Any of our Subscribers who may be desirous of having their numbers of the GAZETTE *bound should leave them with the Librarian.*

The annual Subscription to the GAZETTE *is* 6s. 6d.; *post free,* 7s. 6d. *All financial communications, as well as subscriptions, should be sent to the Financial Editor,* Mr. C. H. WELLS, SECRETARY'S OFFICE, GUY'S HOSPITAL.

The charge for binding in blue, with the Arms of the Hospital in gold will be ONE SHILLING AND SIXPENCE.

Calendar of Coming Events.

July, 1901.

Sat. 6.—Messrs. Lucas and Lane's take-in; Drs., E. Faulkes and H. T. Palmer; Cl., M. A. Collins.
G.H.C.C., I. v. Upper Tooting, away.
G.H.L.T.C., II. v. St. Thomas's, home.

Mon. 8.—1.15 p.m., Clinical lecture by Mr. Laidlaw Purves.
Second part of the Conjoint D.P.H. Exam. begins.
August Appointment List closed.
Preliminary Scientific M.B. Lond. Exam. begins.

Wed. 10.—Garden Party and Distribution of Prizes.

Thur. 11.—Messrs. Golding-Bird and Dunn's take-in; Drs., L. G. Nash and J. D. Pearson; Cl., A. C. H. Gray.

Fri. 12.—1.15 p.m., Clinical lecture by Mr. Fripp.

Sat. 13.—G.H.C.C., I. v. Enfield, away.
G.H.L.T.C., I. v. Harold, away.
II. v. London Hospital, home.

Wed. 17.—1.30 p.m., Clinical lecture by Dr. Washbourn.
United Hospitals' Athletic Meeting.

Thur. 18.—Messrs. Jacobson and Fripp's take-in; Drs., W. Collins Lewis and F. L. Thomas; Cl., J. A. Glover.

Fri. 19.—1.15 p.m., Clinical lecture by Mr. Fripp.

Sat. 20.—G.H.C.C., II. v. Hos.-Scho., home.
G.H.L.T.C., II. v. Basingstoke, home.

Guy's Hospital Gazette.

JULY 6, 1901.

Myxœdema.

CLINICAL LECTURE BY DR. HALE WHITE.

May 22nd, 1901.

GENTLEMEN,—You see before you the patient that I am going to take to-day for a clinical lecture. I will, first of all, tell you what Mr. Heap has made out about her history, and then we will go over her symptoms. I will tell you, before we begin, that she is suffering from myxœdema, so that you will be able to associate in your minds the disease and its symptoms as we go along.

What Mr. Heap finds is this. She is a married woman, 48 years old, and she has come into the hospital with general enlargement of the whole of the body and general weakness. The family history is quite unimportant, except that she has had many children. You will see the bearing of that presently. She went to a doctor in 1899. She then complained that her memory was getting bad, and she was very forgetful. She would lose her power of reasoning, especially in connection with money matters, and this chiefly took the direction of loss of memory. She also complained that she was increasing in bulk. She kept about her work although she was easily tired. She then, next, had complete loss of memory. She says she had a swelling in the neck. Dr. Wallis treated her with thyroid tabloids, and she improved very much under the treatment. That is really all the history of the case.

We have here, therefore, a woman who has complained for more than a year of loss of memory, of forgetfulness, of general feebleness and lassitude, and increase in bulk. We further know that she has been treated by thyroid tabloids, and that she has improved under them.

Now, we will go over her case and point out to you the facts about her, and show that she has many symptoms of myxœdema.

First of all, she is the usual sex for the disease. The proportion of women to men in cases of

myxœdema varies from about six or ten women to one man.

The next point which she illustrates as distinctive of the disease, is, that she is of the usual age. Sufferers from myxœdema generally first come under observation somewhere between thirty-five and fifty. Her age, as you have heard, is forty-eight.

Most sufferers from myxœdema have borne many children. She has had ten. Many of them suffer very frequently from menorrhagia. She tells us that she does.

They also say sometimes that the disease is due to exposure to cold. She does not tell us that particularly. But they complain very bitterly of debility and lassitude, and general feebleness, and that, you remember, she complained of when she first came in.

They also complain very much of an increased bulk, and you can see how bulky this woman is. This increase of bulk was probably for many years thought to be an ordinary œdema, but it is not so, for it does not pit upon pressure. If we take any part of her—take, for instance, this very bulky hand—and I try to make it pit upon pressure, you see I cannot make it do so. If that were an ordinary œdema it would pit upon pressure. So that, remember, this very important characteristic of this disease myxœdema

Then I think her face represents the disease most typically. What has attracted previous observers about the face is, that it has a stolid look. There is no brightness or vivacity about the face of myxœdema. The face, too, is full, and the features are not sharply lined—they are somewhat coarse, and the whole face is, more or less, rounded; the original observers frequently spoke of it as a *moon-face*.

Then there is a puffy, swollen look about it which is very strikingly seen in her, and this puffy, swollen look is particularly demonstrable about the eyelids. You can see that the upper eyelids look swollen, and the lower eyelids also, especially that on the left side, have a big appearance. In advanced cases the bigness of the lower eyelids is very striking. The eyelids not only look big, but they have a peculiarly waxy look. I am sure that those of you who are sitting near will agree with me that this lower eyelid (indicated) has a remarkably waxy look, as compared with an eyelid in health. The result of this enlargement of the eyelids, or rather this increase in bulk of them is, that the patient does not have such a wide palpebral aperture as in health, and therefore she is constantly trying to lift up the upper lid to get more light into the eye, and as a consequence the eyebrows are wrinkled.

Then this general puffiness of the face makes the cheeks hang down. I knew a case of myxœdema where the patient complained that the cheeks were like bags. This patient shows it to some degree, especially this cheek (indicated). But you must remember that she has been irregularly under treatment for some time.

The lips in these people are full and big, as you see they are in her. And the nose, too, partakes of the general broad and coarse look of the disease. In an advanced case the ears are thick. Certainly this ear (indicated) is not thin; I think it is perhaps a little thicker than it should be.

Well, then, the general colour of the face. It is, I think, almost a characteristic tint. The face in these cases is described as being of a dingy-yellow colour, and if you look at this patient and then look at people in reasonable health, you will see the difference of colour. What I would point out to you as of interest is, that if the face is a dingy-yellow, there is generally, as in her, a pinkish colour on the cheeks, and to a less extent on the lips.

Now as to the hair in these cases. The hair is thin, coarse and dry. That is often very well seen in the eyebrows. She has not got much hair there. Then she tells us that the hair on her head has come out, and it is, especially on one side of her head, very dry. In an extreme case you can almost diagnose the disease, by looking at the patient, owing to this dry hair which you see on the scalp; and very often it is associated with a dirty-brown incrustation on the scalp, which makes the whole head pathognomonic of the disease.

The general swelling that these patients get affects the tongue and buccal mucous membrane. We think her tongue is a little enlarged. No

doubt, when she was first taken with the disease, the tongue was more enlarged. And this general enlargement of the parts inside the mouth is seen not only in the tongue, but in the mucous membrane; it is seen at the back of the pharynx, and in extreme cases even in the larynx.

The neck in these people is broad and thick, as you certainly see it is in her, and very often there are superficial masses of fat to be detected on either side above the clavicle.

The hands and feet partake of this enlargement. Those of you who are near enough can see that these hands have a large, thick look. Sir William Gull originally described the hands, in this disease, as "spade-like," because the whole of the fingers are not rounded, but flattened, so that they become more or less square-shaped. The whole hand has a dingy-yellow, pale, thick, broad, heavy look. This condition of the hands and fingers, equally in both hands, is especially characteristic of the disease.

You will notice the same condition of her feet, which you will remember is not an œdema; it does not pit upon pressure.

The result, of course, of these broad heavy hands is that they cannot do fine movements. The patients cannot button or unbutton their clothes; they find difficulty in sewing. She has told us that she has that difficulty.

Sometimes the enlargement affects other parts of the body. The trunk and the external genitals show the swelling.

The next thing I want to draw your attention to, which is very important in the disease, is the extreme dryness in the skin. The skin is harsh and dry, and yesterday when we stripped the patient we were all struck with that fact. The soles may be scaly, and the scales flake off.

As the skin is dry, you are not surprised to hear that there is very little sweat or sebaceous secretion. Then, too, the hair itself gets affected. Not only does it come out, but it may change its colour, and the friends of a patient may even accuse her of having dyed her hair when she has not done so.

Another thing, you remember, that I pointed out to you in reading her report, was her mental condition—her forgetfulness. The slow cerebration is very striking in these patients. Their movements are slow, they think slowly and deliberately, both imperfections being dependent upon a general slow cerebration. That leads to the speech being affected. The speech is very slow and deliberate; and that is partly mental, and, no doubt, partly due to the swelling of the parts inside the mouth. And the movements in the same way are very slow and deliberate, and the gait has not been inaptly described as being like a hippopotamus. You saw that there was some justification for that simile from the manner in which she walked in.

Of course, on account of the slowness and difficulty of movement the patients are very liable to fall. She told us yesterday that she was particularly liable to fall.

And the special senses get dulled. She does not hear as well as she should; her sight is not so good as it was; the power of smell and taste may become impaired. Very often these patients complain of headache.

Her temperature is low. One thing is very striking in these patients, and that is their great susceptibility to cold. I think that is one of the commonest symptoms of myxœdema. In the warmest weather they will put on warm clothes, and like to sit by the fire.

They are always a little anæmic, the heart's action is feeble, they suffer from dyspepsia, the bowels are constipated.

Lastly, remember that the patients are very liable to discharge of blood, and, as you may suppose, considering the sex, it generally takes, as in our patient's case, the form of menorrhagia; also sometimes there may be a little albuminuria.

Now that I have demonstrated the points of the case I think we may let her go, and then I will tell you something more about the disease.

Myxœdema is a disease of which, in one sense, we are very proud at Guy's, because it is one of several diseases that our great predecessors here have been the first to describe. The first person who described this disease was Sir William Gull. I have here the accounts of the original cases which he described.

The first case is that of a woman who "became inadequately more or less languid, with general increase of bulk. This change went on from year to year. Her face altered from oval to round, like the full moon rising. With a complexion soft and fair, the skin, presenting a peculiarly smooth and fine texture, was almost porcelainous in aspect, the cheeks tinted with a delicate rose-purple, the cellular tissue under the eyes being loose and folded, and that under the jaws and in the neck becoming heavy, thickened and folded. The lips large and of a rose-purple, alæ nasi thick, cornea and pupil of the eye normal, but the distance between the eyes appearing disproportionately wide, and the rest of the nose depressed, giving the whole face a flattened, broad character. The hair flaxen and soft, the whole expression of the face remarkably placid. The tongue broad and thick, voice gutteral, and the pronunciation as if the tongue were too large for the mouth (cretinoid). The hands peculiarly broad and thick, spade-like, as if the whole texture were infiltrated. The integument of the chest and abdomen loaded with subcutaneous fat. The upper and lower extremities also large and fat, with slight trace of œdema over the tibiæ, but this not distinct. Urine normal. Heart's action and sounds normal. Pulse 72; breathing 18. In the patient whose condition I have given above, there had been a distinct change in the mental state. The mind which had previously been active and inquisitive, assumed a gentle, placid indifference, corresponding to the muscular languor, but the intellect was unimpaired."

Sir William Gull's second case was that of "a married woman, aged 40, having had five children. There had been a gradual and general increase of bulk. The features had become broad and fattened. The skin was peculiarly fair, and fine, and soft, with a very delicate rose-bloom on the cheeks. The cellular tissue about the eyes was thrown into folds, giving the expression a coarse look of being œdematous. The eyes were bright; the lips were thickened and of a light rose-purple. Tongue large, the speech gutteral and, as in the former case, as if the tongue were rather unwieldy. There was no discoverable change in any of the viscera. The catamenia were too profuse." The rest of the description I need not read, because it is much the same as in the previous case. So that, you see, there we have a description of two women, just such as we have seen here.

Well now, fortunately, as I shall show you, at the present time we know how to successfully treat cases of myxœdema, and therefore we very rarely see them in the post-mortem room, but I will tell you what I found at the post-mortem of a case when we did not know how to treat the disease. The lungs, kidneys, spleen, heart, suprarenals, lymphatic glands, carotid artery, sciatic nerve and pituitary body were all healthy. There was a slight proliferation of nuclei in the liver, which was slightly fatty. The connective tissue of the submaxillary gland and of some of the sympathetic ganglia had a sodden appearance. The thyroid was very atrophied, hardly any proper thyroid substance being left.

The whole post-mortem can be summed up by saying that, with the exception of the atrophied thyroid gland, there was nothing wrong with the organs other than that some had a sodden look. You say, "Then why did she die?" She happened to die of peritonitis, but that had nothing to do with the myxœdema.

You have now heard descriptions of clinical cases, and I have been able to read to you the post-mortem record of a case that occurred in this hospital.

The essential of the disease is, that there is an atrophy of thyroid body. I have brought down here for you to see the thyroids from patients with myxœdema. You can probably see how atrophied this thyroid body (produced) is. Here is another one which shows the atrophy admirably.

This atrophy of the glandular structure is associated with a small-celled infiltration, and later on this infiltration is replaced by fibrous tissue, and the whole organ shrinks. The post-mortem which I have just read of the case that died here was interesting in this: the sections of the thyroid body showed that we had got the disease rather early, for there was a good deal of small-celled infiltration, and, had she lived, that would have gone on to the formation of fibrous tissue.

Occasionally the thyroid is enlarged, but that is very rare, and the thyroid body is virtually small in cases in which it is enlarged. What I mean is this; obviously, whether the thyroid is enlarged or small will depend upon whether the fibrous tissue which replaces the gland structure is in excess of the original gland structure, or less than the original gland structure. If the development of fibrous tissue is very great, then the thyroid gland becomes larger than normal, although the secreting structure is destroyed. The thyroid gland in the woman whom you saw just now is rather larger than normal, but this is quite exceptional. In nearly all cases the fibrous tissue contracts and leaves the gland small.

The next point about the post-mortem is the condition of the skin and mucous membrane and tissues that produces this sodden jelly-like look. This is produced by some substance which we do not know much about. Originally it was thought to be mucin, or allied to mucin, but that idea is given up. At any rate, by the time the patients die, if it was originally mucin, it is not mucin. Occasionally, in older people, the kidneys show signs of degeneration, and in others the pituitary body is said to be slightly enlarged. But what I want you to get hold of, as the main idea, is this, that because of the atrophy of the secreting structure of the thyroid gland, a sodden condition of the skin and mucous membrane and the mental change are produced. It is because of the mental change that Sir William Gull originally described his cases as illustrating a cretinoid state supervening in adult life.

Well, now you will say, "How do you know that the condition of the skin may not be the cause of the alteration in the thyroid? Why do you say that the thyroid change is the cause of the myxœdematous skin and mucous membrane?" For these reasons: In those who die of myxœdema the thyroid is invariably found to be atrophied. In the next place, it is the only constant lesion. The condition of the skin may vary. In the next place, it is found that the total extirpation of the thyroid in the lower animals is often followed by symptoms closely resembling those of myxœdema. In the fourth place, the total extirpation of the gland in man is followed by myxœdema, and the way we know that is this. After Sir William Gull's description was published and we in this country became interested in the disease clinically, the Swiss doctors noticed that they had got instances of the disease in some of the Swiss valleys. They then found that the instances of the disease in the Swiss valleys occurred in women who had had their thyroids taken out for goître, which is very common there, and subsequent investigations all over the world have clearly shown that if in man the thyroid gland is totally extirpated, myxœdema will ensue. The last proof that the disease is due to atrophy of the thyroid gland is remarkable, it is that if you feed people suffering from myxœdema on thyroids of other animals, they will recover from their myxœdema.

There are two views as to the way in which the disease comes about. One is that the thyroid gland pours into the blood in health some substance necessary for the nutrition of the tissues, particularly the skin and the cerebro-spinal tissue. The other view supposes that the thyroid is constantly separating some deleterious substance from the blood. It seems to be most probable that the first view is true, namely, that the thyroid is constantly pouring into the blood something for the proper nutrition of the tissues. The reason why this is the more likely view, is that you can cure patients by giving them thyroid in which case you may fairly suppose you are giving them the substance that is necessary for the proper nutrition of the tissues. So much for the pathology of the disease.

The next thing to consider is the treatment. The history of the treatment is very interesting. It originally occurred to Schiff and Horsley that, possibly, as animals get myxœdema when the thyroid was taken away, by transplanting thyroid under the skin you could stop the development of the symptoms; and it was shown that that could be done, but only for a time, because the transplanted thyroid under the skin soon got absorbed. Next it occurred to Murray, of Newcastle, that if that was so, why not inject thyroid subcutaneously, and to him belongs the credit of showing that solutions

of thyroid injected subcutaneously will cure patients suffering from myxœdema. Then there came a more extraordinary discovery, made simultaneously by Hector Mackenzie, H. L. Fox, and Howitz, that if you give the thyroid of another animal by the mouth, you can cure myxœdema in the human subject. This discovery has made many people study the physiological effects of giving thyroid, and it has been found that these effects are very powerful. Therefore, it is very important that you should know what are the effects of an overdose, because, over and over again, doctors have done their patients harm; they have given their patients too much thyroid and the patients have been poisoned thereby, and the symptoms of poisoning by thyroid have been set down to myxœdema.

The symptoms of poisoning by thyroid in these cases are the following. The pulse quickens, often reaching over 110, it is often a little irregular. The temperature rises and the patients feel weak and out of sorts. Then, too, they suffer very considerably from dyspeptic symptoms, they complain of a burning taste in the mouth, they complain of loss of appetite and nausea and flatulence. They also may be sick. They, further, complain very much of headache, and also very likely of considerable thirst. So that in any case in which you are treating a patient with thyroid, if her temperature goes up her pulse becomes rapid and she becomes dyspeptic, you know that in all probability you have given an overdose, and you must diminish the quantity you are giving.

There are two preparations of sheep's thyroid in the British Pharmacopœia. One is the liquor and the other is a dry powder. The best way to treat a patient with thyroid is to begin with quite small doses, from 3 to 5 minims of the liquor, or 3 to 5 grains of the powder once a day, gradually increasing it, watching carefully to see whether there are any symptoms of poisoning. You will rarely require to give more than 10 minims of the liquor or 10 grains of the powder twice a day. Very often 10 minims or grains once a day will be enough.

The effect of this is wonderful, and to demonstrate it I have copied out the notes of a case. It is a very interesting case, interesting because of the age of the patient, who was an old lady seventy-six years of age, the mother of eighteen children. I saw her with Dr. Robertson at the end of last February and she then told us that lately she had noticed her fingers were becoming larger, so that she could not get on her rings. Her face was puffy and expressionless, her lower eyelids were baggy, her face was dingy yellow, with a pink blush on the cheeks. Her mouth was swollen. Her hands and feet were typical of myxœdema. She was bulky. Her hair, which was dry, came out, her nails were brittle, her skin harsh and dry, her memory was impaired; she was deaf and her speech was thick. Her temperature was subnormal. She was put upon thyroid treatment, and a few days ago, after I had decided to lecture on myxœdema, I wrote to Dr. Robertson, to enquire about her. He kindly replied, and says as follows: "Her temperature now varies between 98° and 99°, she can get her rings on the fingers they were meant for. The last dresses made for her are now too slack. Her skin is soft and pliable, her hair is glossy, her deafness almost gone and her speech is much clearer. She goes out walking or driving every day if fine. You see the woman is completely changed, simply as the result of taking a little thyroid gland from the sheep every day.

The active element in the thyroid gland is the colloid material. Some doctors have given this and others have given iodothyrine, which is thought to be the active principle. I have no experience of either myself. Patients do so well with the liquor and the powder which I have mentioned that it is almost unnecessary to seek for other preparations.

The prognosis is one of the most remarkable things in medicine. You can say to every patient with myxœdema, "I can cure you." When you think that fifteen years ago doctors had to say to every patient, "I can do nothing for you," you will agree that this alteration is one of the most striking advances ever made. If you will give the dose that I mentioned to you just now you will cure your patients. But you will say, "Won't they relapse?" No,

never, provided you continue to give them small doses of thyroid, say 5 grains twice a week for the rest of their life. I am keeping my eye on a patient who many years ago had typical myxœdema. She was cured by taking thyroid, and now doses of 5 grains of powdered sheep's thyroid twice a week are quite sufficient for her. She appears perfectly well, and I defy anyone to know that she has ever had myxœdema at all, so pronounced is the benefit she has received.

Next, the diagnosis of these cases. I think the first thing to tell you in connection with the diagnosis is this: that you must not expect these patients to be like those described in the books. All the cases seen some years ago when I made post-mortems were just like the severe cases described in the books. But now the disease is detected early, and you no longer regard it as a hopelessly incurable malady, so that you are on the look out to diagnose it early, and being taken early the patients, like this one that you saw here, rarely show an extreme degree of all the symptoms; so that it will only be in some remote parts of the world where medical knowledge is poor that you are likely to see a fully developed case of myxœdema. Now that so much can be done for the disease you must be on the outlook for it, and notice the slightest symptom of it, and treat the patient accordingly.

It is said in the books that myxœdema may be confounded with acute Bright's disease. There is no real need to go into that point: the differences are so great. A patient with acute Bright's disease has actual œdema and the legs pit. In myxœdema, as in the case you have just seen, the legs do not pit. Then, too, the facial appearance is quite different in the two diseases. The patient with Bright's disease has a more or less expressionless face, as the result of œdema; it will be a deadly white pale colour, but will not be that dingy-yellow look, with a pinkish blush upon the cheeks, that Sir William Gull referred to as characterising myxœdema. Then, too, of course, patients with Bright's disease have probably casts in the urine, and albuminuria which will be permanent. The transient albuminuria that patients may show in myxœdema goes soon after the patient is treated. And then, lastly, if you are in any doubt as to whether a case is one of myxœdema or Bright's disease, the thyroid treatment will settle the diagnosis at once.

Again, it has been mentioned that acromegaly may give rise to some difficulty in the diagnosis. Let me recall to you what that disease is. It is somewhat like myxœdema; it is a disease in which the essential lesion is hypertrophy of the pituitary body, the anterior part, and that change alters the whole metabolism of the body, so that the bones become thickened and the tissues become thickened. But there is no real likelihood of confounding the two diseases, because in acromegaly the bones as well as the soft tissues become thickened, and further, in the enlargement of the face the enlargement in acromegaly affects chiefly the lower jaw. Hence the difference is very marked. Then the skin in acromegaly is moist and the hair is abundant, instead of, as in myxœdema, the skin being dry and the hair being scanty.

Then some of you who were round the ward the other day asked quite rightly whether it might not be difficult to tell myxœdema from adiposis dolorosa, of which you have seen an instance in Mary ward on several occasions during recent years. The differences are very striking. I was always pointing out to you that in adiposis dolorosa the fatty enlargement spared the face, hands and feet, just the very parts in which the enlargement in myxœdema is especially seen. Further, in adiposis dolorosa there is pain and much anæsthesia. There are in addition, for help in diagnosis, other points which are indicative of myxœdema. These we have already gone over.

Well now, is there anything further about the disease? Just now I told you it was undoubtedly due to atrophy of the thyroid body. But if you will think about your anatomy you will remember there are four little glands close to the thyroid body called the parathyroids. In man they are so close to the thyroid body that it is very difficult to separate them. You remember they have quite a different structure from the thyroids; they are composed of gland cells, but they contain no colloid material. Now, in dogs,

if you take away both the thyroid and the parathyroids the creature dies. It was found by experimenters that in dogs it was extremely difficult to take away the thyroid without the parathyroids, because they are so closely in contact. Therefore, they operated upon rabbits where the lower pair of the parathyroids happen to be further removed from the thyroid, and they found that if in rabbits they took away the thyroid only, the animal did not die; the parathyroid seemed to keep it going. In dogs, however, careful operators were enabled to take away the thyroid without the parathyroids, and they found that the dogs, too, did not die, but if when they had taken away the thyroid, and then subsequently took away the parathyroids the animal died; and if the parathyroids are taken away, and the thyroid is left the creature dies, and then the thyroid gland undergoes peculiar changes, for the colloid material disappears and the vesicles appear to be filled with a watery sort of secretion. What part the parathyroids play in relation to the blood in myxœdema we do not know, but it has been clearly shown that, at any rate in the lower animals, the parathyroids, minute glands as they are, are quite as important as the thyroid.

Myxœdema appears to have two relationships. In the first place, there is a disease called sporadic cretinism, of which we have a specimen of the thyroid in this bottle, which is nothing more than juvenile myxœdema; it is myxœdema coming on in young subjects. The symptoms are just the same, with this addition, namely, that because the metabolism, owing to there being no thyroid secretion, has been altered at a period of life before the growth is complete, the body becomes stunted, growth does not take place, and the sufferers are generally about two or three feet high—they are dwarfs. And, like in myxœdema, the patients are very stupid, dull and apathetic. If you put them in the sun, they will sit there like vegetables the whole day, apparently enjoying themselves, never speaking, and hardly replying when spoken to. Here is a thyroid gland (produced) from a sporadic cretin, and you can see how atrophied it is. The left lobe of the thyroid is completely atrophied, and the right one is destroyed by a cystic tumour, so that there is no thyroid there. That patient was remarkably short. He was 23 years old, and his height was 2 feet $7\frac{3}{4}$ inches.

The treatment of these sporadic cretins is one of the most wonderful things in medicine. If you take these cases of sporadic cretinism and feed them on thyroid, in many of them the growth begins and the mind clears. This is one of the most dramatic discoveries made in our time. I do not mean to say that every sporadic cretin can be cured by the administration of thyroid. It obviously depends upon how long the disease has lasted. But this I do say, that you may get the most wonderful results, and you see mentally dull, weak, feeble, stunted children becoming comparatively bright and commencing to grow.

Then the other disease with which myxœdema is related is a disease which is just its opposite, namely, ordinary exophthalmic goître. Here is a specimen of that, and you see the enormously enlarged thyroid gland. The points of contrast between the disease of which the fundamental fact is an enlargement of the thyroid, that is to say, exophthalmic goître, and the disease of which the fundamental fact is its atrophy, that is to say, myxœdema are as follows: In myxœdema the thyroid is atrophied; in exophthalmic goître it is enlarged. In myxœdema we believe that no secretion from the thyroid is poured into the blood; in exophthalmic goître we believe that an altered secretion is poured into the blood. Myxœdema occurs in middle life; exophthalmic goître occurs in young people. Myxœdema occurs usually in women who have had a large number of children; this is not noticeable in cases of exophthalmic goître. The temperature is subnormal in myxœdema; it is usually raised in cases of exophthalmic goître. The skin is harsh and dry in myxœdema. You will remember that it is particularly moist in exophthalmic goître. The dry harsh skin of myxœdema means that the electrical resistance is considerably increased; the electrical resistance in the skin in exophthalmic goître is diminished. The bowels are generally constipated in patients with myxœdema, whereas I have often pointed

out to you, because it is so important in the prognosis, that they are usually very much relaxed in exophthalmic goître. I have told you already several times in this lecture that in myxœdema the patients are dull, placid, forgetful of everything. You know, from the many cases you have seen, that patients with exophthalmic goître are usually particularly bright and on the alert. Then, too, there is, of course, the striking difference that the thyroid treatment which will cure myxœdema has no influence whatever on sufferers from exophthalmic goître. Bearing in mind the close relationship between the two diseases you will not be surprised to hear that sometimes a patient with exophthalmic goître suffers later in life from myxœdema.

An Interesting Case of Abdominal Injury.

J. B., 37 years of age, was admitted into Cornelius ward under Mr. Golding-Bird, on April 18th, suffering from an abdominal injury. The history of the case was that the patient, in stepping suddenly off the curb, when under the influence of drink, was knocked down by a van weighing 30 cwt., one of the back wheels of which passed over his abdomen.

On admission at 5.30 p.m., patient was in an extremely collapsed condition, the pulse could barely be felt. He was lying with both legs drawn up. There was a bruise and skin abrasion over the end of the ninth rib on the right side, and another on the left side just above the crest of the ilium. The wheel, therefore, crossed the abdomen just where the third part of the duodenum crosses the body of the third lumbar vertebra. There was no distension or abdominal swelling; the abdomen moved on respiration, and was not rigid on palpation. There was slight dulness over the left hypochondriac region, but hepatic dulness was present. There was no sign of blood in the vomit or urine. Mr. Steward saw the patient within an hour of admission, and expressed the opinion that there was no ruptured viscus, but that he was suffering from peritonealism.

At 11 p.m. Mr. Dunn saw the patient, who was in the same condition, and agreed with Mr. Steward's diagnosis.

At 10 a.m., on the morning of the 19th, patient was not so collapsed, but had been vomiting a good deal of bile-stained fluid during the night. He was sensible, and complained of pain in the left hypochondriac region. Patient now said that he had had no solid food for twenty-four hours before the accident, but had "been on the drink" for several days.

At 8 p.m., patient was decidedly worse, he had vomited all day. There was loss of hepatic dulness, while dulness was present in the left flank. Mr. Dunn saw patient and advised immediate operation, as he thought there was now no doubt that patient had a ruptured viscus. Patient, however, refused to be operated upon, so the prognosis was considered to be very grave.

Patient continued vomiting, and the vomit gradually became fæcal in character. His pulse was very slow and small, the temperature remained normal, while the abdomen became more and more rigid.

On the 20th, patient's condition was worse, vomiting continued, and he was again in a collapsed condition. Mr. Golding-Bird saw him and was of opinion that there was either a post-peritoneal rupture of the duodenum, or a rupture of the duodeno-jejunal junction. Patient, though strongly advised once more as to the necessity of an operation being performed, still refused permission, and on the following day he was in the same collapsed condition. His abdomen had become very swollen, and was still rigid. The temperature had risen to 102°, while the pulse was 104.

22nd. Patient was in the same condition, with abdominal distention and fæcal vomiting. Temperature 103·2°, pulse 112, respiration 16.

23rd. Patient had had no vomiting since the previous day and appeared slightly better. The temperature had fallen to 99·2°, pulse 96.

24th. Patient was better, the vomiting having completely stopped while the temperature was falling.

On the 25th the bowels were opened, the fæces smelt very foul, and were dark in colour (? Melæna).

26th.—Patient showed signs of improvement; the abdominal distension had disappeared, while hepatic dulness had returned.

27th. Patient was stronger and in no pain; temperature was rising, having again reached 100·2°.

28th. Temperature 102·2°, but patient seemed fairly comfortable.

29th. Patient's general condition was improved, but temperature remained up at 101·8°.

May 2nd. Temperature 102·2°. A swelling appeared in the right iliac region, two inches internal to Poupart's ligament. It was hard, non-fluctuating, and dull on percussion. There was some pain on deep pressure over this situation. The skin over the swelling was normal.

3rd. Temperature 103°. Swelling slightly increased in size.

On the 7th, the temperature was still keeping up at 103·4°. The swelling was enlarging, and could now be traced upwards towards the liver, and across the middle-line. It had a very definite outline. Patient was again advised to submit to an operation but refused, Mr. Golding-Bird being of opinion that a post-peritoneal abscess had formed.

12th. Temperature slightly lower (102·6), the swelling was still present, but was not quite so well defined.

15th. Temperature was falling, being 101·4, the swelling was decidedly smaller, and the patient's general condition seemed much improved.

17th. Very little swelling could be felt.

19th. Swelling had disappeared, and the temperature was 99·6°.

24th. A small swelling had again appeared in right iliac fossa, but it had a very indefinite outline; the temperature had again risen to 102°.

26th. Temperature normal; swelling disappeared.

June 13th. Patient discharged quite well.

These, then, are some of the facts which have been taken from Mr. Bethell's excellent report on this interesting case. One almost feels inclined to suggest, when bearing in mind the above symptoms, that the patient is only apparently well, and that there will be a sequel to his case. Time alone will show.

J. S. S. P.

Convalescence in Diphtheria.

SINCE the extension of the Isolation Wards at the Hospital made it possible to retain special cases of diphtheria until convalescent, it seemed necessary to make some rule as to the date at which the cases could be discharged.

With a view to determining the safest course tc pursue, Dr. Hale White consulted Dr. Foord Caiger, of the South Western Fever Hospital, whose reply we append.

Our thanks are due to Dr. Hale White for permitting us to publish the letter, and also to Dr. Foord Caiger for stating the case so clearly.

South Western Fever Hospital,
Stockwell, S.W.,
June 17th, 1901.

DEAR DR. HALE WHITE,—Pardon my not having replied to your note before. I have for several years practically discarded the bacteriological test in diphtheria as the criterion of a patient's fitness for discharge, in fact, after having tried it in practice for a very few months, it soon became evident that if the presence of assumed Klebs-Löffler bacilli was to be the determining factor, it would be necessary (if one had any regard for consistency) to not only detain patients very often for several months, but to also impound the diphtheria staff as well. When, however, a diphtheria patient, probably a child, is returning *to an institution*, such as an orphanage, or school, in which are lodged, or congregate, many other children, I have the throat and nasal secretion examined, and the child is detained if K.L.B.'s are detected; but should this imply an unduly prolonged detention, the bacilli are subjected to the inoculation test in order to make quite sure that they are genuine K.L.B.'s. If they are genuine the child is detained until they disappear, as evidenced by *three consecutive daily negative examinations*. Such cases are comparatively infrequent. As a routine practice, a patient, if an adult and a bread winner, is regarded as fit for discharge at the end of three weeks from the time that the exudation has completely cleared from the throat, but in the case of children we detain them for four weeks instead of three. It is, of course, understood that no sore throat, nasal discharge, or paralysis is present at the time of discharge. I have followed this rule-of-thumb practice for a good many years, and see no reason to change it. The results, as evidenced by a number of "return cases," are satisfactory. At some of the Asylums Board Hospitals they insist on a longer detention than this, and I believe one or two of the Medical Superintendents rely on the bacteriological test. In a recent investigation carried out by Professor W. J. Simpson, into the incidence and causation of "return cases" from the hospitals of the M.A.B. during a period extending over six months, the proportion of "return cases" was ·5 per cent. on the total number of patients discharged from this hospital. The larger number of these cases were scarlet fever, and I doubt if the return cases of diphtheria would have been more than ·3 per cent. As a matter of fact the results came out much better than I could have hoped, but the enquiry only extended over a period of six months, and so can have but a limited value. An incidence of only ·3 per cent., however, might be quite reasonably explained by the possibilities of co-incidence.

You will, I think, agree that the results of what must be admitted to be merely an empirical system are sufficiently satisfactory as to make one feel that there cannot be much wrong. Possibly, we may detain the patients unnecessarily *long*, but I do not care to send them out earlier on account of possible cardiac and paralytic developments, apart from the question of there being any risk to the community. My advice can only be, "Do thou likewise."—Yours sincerely,

J. FOORD CAIGER.

Papers by Guy's Men.

A Case of Ovarian Tumour, complicated by Tuberculous Peritonitis. Operation. Death from Toxæmia. Under the care of Dr. Henry Davy and Mr. A. C. Roper.—*The Lancet*, 15th June.

Syphilitic Heredity. By S. W. MacIlwaine, L.R.C.P., M.R.C.S.—*British Medical Journal*, 15th June.

Remarks on Skiagraphy and Fractures; especially in their Medico-legal Relation (with special plate). By C. H. Golding-Bird, M.B., F.R.C.S.—*Ibid*, 8th June.

A Case of Oblique Fracture of Tibia and Fibula, with Skiagraphs showing repair. By Benjamin Duke, M.D., M.R.C.S.—*Ibid.*

The Lepers of the Pacific Islands: A Visit to Molokai, Penrhyn Island. By Surgeon Percival M. May, R.N.—*Ibid.*

Some Remarks on the Causation and Diagnosis of Acute Intestinal Obstruction. By J. H. Bryant, M.D., F.R.C.P.—*The Clinical Journal*, 12th June.

Four Clinical Lectures on Some Affections of the Kidney. Lecture II. By A. H. Tubby, M.S., F.R.C.S.—*Ibid.*

Passim.

The "*Nineteenth Century and After*," for June, contained a notable article from the pen of Dr. E. H. Starling, entitled, "The Pressing Need for more Universities." In the somewhat pessimistic vein which is the fashion of the time, Dr. Starling points to the advance made by Germany in the great competition for trade supremacy. According to him the crux of the matter lies in the successful application of science to the arts and manufactures which is so generally practised by our Teutonic rivals, and so carefully fostered by their government. The second section of his contribution consists of an emphatic demand for a teaching university in London, and he points out in a lucid manner how the various existing institutions might be made nuclei for the different departments of one great school. As regards our own profession, for instance, he advocates the centralization of the various medical schools as far as the preliminary courses are concerned. Instead of numerous classes being held for the teaching of chemistry, biology, physiology, etc., students from the various schools might attend the same courses for instruction at the hands of a permanent staff of specialists in these subjects. In this way the student would probably receive more efficient teaching, and the younger men on the staffs of the various hospitals could devote their time and energy to special research in the various departments of disease and its cure.

It is satisfactory to learn that in one department, we, especially at Guy's, enjoy an immense advantage over the medical students of the continent. In a contribution published in another column, Mr. A. W. Ormond speaks of the much greater facilities which we possess for clinical study as compared with the students at German and Austrian medical schools. Nor is Mr. Ormond alone, we learn from other sources that it is quite possible for a man to obtain a medical degree at some of the continental schools, though possessing only a most rudimentary knowledge of the practical side of his profession. A man may become a qualified surgeon without ever having laid hands on a patient, and the foreign clinics consist of qualified men who are attempting to apply their book knowledge to practice.

Our self-congratulations on this score should make us more alive to the responsibilities of our various appointments. We are given such a free hand in many matters that we should be all the more determined to maintain a strict regard for other people's rights, and to stick to the rules of the game. Questions of etiquette, and procedure are continually cropping up, and sometimes causing more friction than is pleasant. We fancy that too often the standing orders supplied when one takes up an appointment are apt to be forgotten during the new accession of importance. Could they not be made rather more impressive, and permanently posted up as an aid to memory?

At the House of Commons on Thursday last, Mr. Brodrick gave the names of the Committee of Experts who have been appointed to consider the scheme drawn up for the future organisation of the Army Medical Service. The list includes the names of Mr. A. D. Fripp and Dr. Perry. We may take it as a decided compliment to Guy's that two Commissioners have been selected from our Staff, although Dr. Perry also represents the Senate of the London University. Our Superintendent's skill in questions of organisation needs no comment on our part, while Mr. Fripp, during his work in South Africa, had an excellent opportunity of noting the excellencies, and also the weak points of our Army Medical Service as at present constituted. We have no doubt that the Commission will make use of the experience of many other Guy's men during its considerations, and of the younger men so used we should like to see our old Editor, Mr. F. E. Fremantle. He has already on more than one occasion expressed his views on the subject with the pen of a ready writer, and we await his promised book on the War in South Africa with no little impatience.

We hear that Mr. Robert Gordon, to whom we are already indebted for munificent donations to the Hospital, has offered to equip an

ambulance for the transport of patients admitted from the maternity district. The hansom, and the harmless necessary growler, are all very well in their place, but anyone who has assisted in the removal of the British matron from the Borough to Guy's, will bless the name of Gordon. It has been suggested that the ambulance should be an "automobile," thus reducing the cost of maintenance, and increasing its efficiency when required for an urgent case. The "extern" of the future will do well to extend his knowledge of the various "mechanisms and movements" so as to embrace those special to the motor car.

IN view of the approaching prize day, when Guy's annually presents a smiling and seemly appearance to its visitors, we appreciate the necessity for stowing away into unseen corners the various heaps of loose bricks and other unconsidered trifles which have for long littered the "Park." Could not the Clerk of the Works have found a more convenient place for his bricks than the front of the racquet court, which has become a regular trap for squash balls escaping over the low wall of the court? The consequent expense in money, patience, and epithets has become considerable, and considering the close proximity of the "nursery" to the court, it would be wise to remove such an incentive to the wrathful rhetoric of the ball seekers.

WE should like to call the attention of the keen men of the dissecting room to the Barker Anatomical Prize of the Royal College of Surgeons for Ireland. This prize of £21 is offered for competition, being open to any student whose name is on the anatomical class list of any school in the United Kingdom. The preparations entered must be placed in charge of the Curator of the Museums, Royal College of Surgeons, Dublin, before March 31st, 1902. The prize, on this occasion, is offered for a dissection showing the distribution in the head and neck of the 7th, 8th, 9th, 10th, 11th, and 12th cranial nerves. Further information as to the conditions under which the competition is carried out may be obtained from the Curator.

SURGEON-LIEUTENANT-COLONEL H. WRIGHT, V.D., First Volunteer Battalion Lincolnshire Regiment, who went out to the Cape as Major in the R.A.M.C., has been invalided home on account of ill health. Colonel Wright was attached to No. 9 General Hospital, Bloemfontein. He was subsequently in charge of the Bloemfontein Hospital, and was on the Staff of General Pretyman, Military Governor of the Orange River Colony.

MUCH as we regret the loss which the hospital has sustained in the departure of our late Assistant Matron, we cannot but congratulate Sister Bessie on her advancement. We wish her every success in her new sphere of action, and know that Carlisle will benefit by her experience, and by her loyalty to the traditions of Guy's.

OUR congratulations to Mr. E. I. Claxton on being awarded the Treasurer's Gold Medal in Clinical Surgery. The Gold Medal in Medicine has, apparently, not been awarded. One cannot but feel that the conditions under which the examinations are held need revision if more competition is to be aroused.

"GOING OFF NIGHT" came round again last Saturday evening with its regrets at the departure of old friends, and its congratulations to those who are to fill their places in the "Seats of the Mighty." Mr. L. E. Stamm succeeds Mr. T. P. Thomas, in the office of President of the Residents, while Mr. T. E. Holmes becomes "Vice" in place of Mr. Goble.

THE annual athletic sports meeting, held at Honor Park on Wednesday week, was voted an unqualified success. The ground was in good trim, the clerk of the weather did his very best, and the secretaries of the Athletic Club, Messrs. R. S. Roper and E. M. Harrison, are to be congratulated on the result of their labours.

WHILE there were no time records, with perhaps the exception of the 100 yards, which was won from 1 yard by E. Morgan in $10\frac{1}{5}$ seconds, there was a record attendance, a

record "gate," and a record display of dainty costumes on the part of our fair visitors.

We were glad, as always, to notice the presence of so many of the Staff, and amongst many old friends Dr. Pye-Smith was especially welcome. Mr. Lucas, the President of the Club, was unfortunately absent, owing to ill health, but Mr. Higgens kindly took his place, and was indefatigable in his efforts to make the meeting a success.

The "Honor Oak Park Scurry Stakes, for Donkeys, to be ridden by members of the Hospital Clubs' Union, about last furlong of new course," created intense excitement. Donkey No. 2 is apparently a scion of a noble race, for the way in which he upset the calculations of his backers and would-be riders was remarkable. The stoical expression of one of our colonial sportsmen mounted on a beast who would only move when turned towards home was also a source of much amusement, while the in-and-out running of last year's winner of this event evoked considerable comment. The Stewards, however, determined to take no action in the matter.

If Bart.'s could only turn out their full team for the Inter-hospital Sports there could be little doubt as to the destiny of the shield this year. As this, however, seems to be unlikely at present, competition should be very open, and, if our men keep fit, we have great hopes for their success.

At the L.A.C. meeting held last Saturday, Wadson ran with some success, being second to Jupp in the 100 yards, and winning a hurdle event. Harrison also won his heat in the Handicap Hurdles.

In their match against "The Past," the Cricket XI. made a very poor display. Against 233 runs got by the "Past," for whom W. J. Hancock played a good innings of 84, the "Present" could only respond with a total of 56, while, on following on, they secured 99 for six wickets. In their first innings they seemed to find the bowling of E. D. Hancock and R. Ingram very deadly, the latter taking seven wickets for 31 runs.

In the semi-final round of the Cup ties, the eleven did much better against University College Hospital. The latter batted first, and only put together 102 runs, while Guy's replied with the respectable total of 468, to which Graham-Smith and M. Wetherell contributed 118 and 102, not out, respectively. We meet St. Bartholomew's in the final round, which will probably be played at Honor Oak Park, on July 11th and 12th. If our men show their best form our chances of regaining the cup would seem to be fairly good.

The Second Eleven have shown consistent good form up to the present, experiencing their first defeat this season at the hands of Reigate Priory 2nd XI., on Saturday last. This was chiefly due to defections in the team, as only four of the regular eleven were present.

The Cricket Club were again entertained by Dr. Brailey, their President, on Saturday, June 22nd, after the "Past *versus* Present" match. At a very pleasant dinner held in the College we noted the presence of many noted old Guy's cricketers whose prowess has by no means left them. The usual round of songs and speeches made the evening pass only too quickly, and everyone departed reassured by the President's dictum that all good cricketers go to a better world hereafter.

Appointments.

DENTAL APPOINTMENTS.

The following appointments have been recommended by the Dental Council and approved by the House Committee:—

Dental House-Surgeons (July to December).—Messrs. G. W. Badcock and A. H. Clogg.

Assistant Dental House-Surgeons (July to September).—Messrs. G. H. Morris and H. C. Visick.

Demonstrators in the Conservation Room (July to December).—Messrs. J. A. Donald, H. Thacker, and H. P. Aubrey.

CIVIL.

CLARK, J. KENNETH, L.D.S, Eng., has been appointed Civil Dental Surgeon for Service in South Africa.

FORTY, DANIEL H., L.R.C,P. Lond., M.R.C.S., has been appointed Deputy Medical Officer of the Charfield and Tortworth District by the Thornbury (Gloucestershire) Board of Guardians and District Council.

GOLDING-BIRD, Mr. C. H., has been appointed an Examiner in Surgery for Medical and Surgical Degrees at the University of Cambridge.

GRUGGEN, WILLIAM, L.R.C.P. Irel., L.F.P.S. Glasg., D.P.H. Camb., has been appointed Medical Officer of Health of Tring.

NAVAL AND MILITARY.

Surgeon J. F. M. McDOUGALL, R.N., has been appointed to the *Harrier*.

Colonel W. E. SAUNDERS, C.B., R.A.M.C., has embarked for India, and Major S. O. Stuart, R.A.M.C., has joined at Woolwich.

Lieutenant-Colonels G. C. HALL and J. DUKE, Bengal Establishment, are granted the temporary rank of Colonel while officiating as Principal Medical Officers of the Lahore and Presidency Districts respectively.

BERTRAM WHEWELL HOGARTH, M.D., to be Surgeon-Lieutenant, 2nd Volunteer Battalion, The King's Own (Royal Lancaster Regiment).

Surgeon-Lieutenant H. J. HOLMAN, 1st Cinque Ports, is promoted to be Surgeon-Captain.

Surgeon-Lieutenant-Colonel H. WRIGHT, V.D., 1st Volunteer Battalion Lincolnshire Regiment, resigns his Commission, and is allowed to retain his rank and to wear the uniform of his regiment.

The following gentlemen have been appointed members of the Conjoint Examining Board:—

Second Examination.—Physiology.—Professor E. H. Starling.

Third Examination.—Midwifery.—W. R. Dakin, M.D., F.R.C.P., and J. H. Targett, M.S., F.R.C.S.

PRESENTATIONS.

Mr. WILLIAM WHITWORTH, M.R.C.S. Eng., L.S.A,, was on June 6th, presented by the members of the St. Agnes (Cornwall) branch of the St. John Ambulance Association with a silver inkstand, suitably inscribed, as a mark of appreciation for his services as honorary lecturer.

On May 31st, at the Town Hall, Huddersfield, Mr. E. G. ANNIS, Medical officer of Health of Huddersfield, who is leaving the town to enter on a similar appointment in the Metropolitan Borough of Greenwich, was presented by the Mayor, with a drawing-room lamp bearing the inscription "To Dr. Annis, from his brother Officers, Huddersfield, 1901."—*The Lancet*.

Notice.

The Treasurer's Gold Medal in Clinical Surgery has been awarded to Mr. E. I. Claxton.

Some Impressions.

ON returning to England one finds that schemes of education, University schemes for the furtherance of scientific knowledge, schemes of all kinds, are in the air, and one feels that considerable changes will shortly be made in the educational world.

The London medical student comes into contact with the patients at a very early period of his career, consequently I should like to point out to you the condition of the Continental medical student, who has not the same freedom in this respect, and also the necessity to safely guard this privilege when there is every probability of more laboratory work and a more extensive curriculum being imposed on us. In these days when Germany is constantly cited as being a country where progress is most fully manifest, and as being an example to us of management and enterprise (in some cases undoubtedly true) it is encouraging and pleasant to find a direction in which English endeavour still compares favourably with our Teutonic rivals.

Medical work on the Continent is divided into what are known as Clinics, and in a large University several Clinics, on the same branch of medicine may be found. Each clinic, no matter to what particular branch of medicine or surgery it belongs, is arranged on more or less the same principle, viz., a headman or professor assisted by an indefinite number of assistants, the assistants being generally although not of necessity qualified men. The professors are appointed by the University authorities, the post not being open to the assistants, but the professor of some smaller town or University is appointed to a vacancy in a larger or more influential place, so that a vacancy in Vienna is generally filled from Prague or Gratz.

The Hofrath professors may have as many as twenty or thirty qualified assistants under them, using the material from the clinics, and scientifically following out those cases that are in point of rarity or abnormality, of interest.

As a type, allow me to recount the usual procedure in Fuchs' Clinic in Vienna. Here we find about a dozen qualified men assisting in the out-patient work of the Augenklinik. Work starts shortly after 8 a.m., the dressings in the wards being completed shortly after 9 o'clock. Professor Fuchs arrives about 9.15 a.m. and inspects those in-patients who are leaving the hospital that morning, also the new in-patients and the new out-patients, dividing the latter into three groups, one for refractions, one for external diseases of the eye, and the third, a smaller group, for the lecture. The patients are examined in detail by the assistants.

The lecture is given in the Horsaal of the Clinic daily, and, except on Saturdays, lasts from 10.15 to 11.30 a.m., and partakes more of the nature of a demonstration than a lecture, some eight to ten cases being exhibited, taken from the out-patient department. On Saturday morning, at 9 a.m., a pathological demonstration, with lantern

slides, is given, and is excellently carried out. After the lecture operations are performed, and the morning's work ceases between 12.30 and 1 p.m. Sometimes a few old cases are seen in the afternoon, but this is not usually necessary. Two assistants are resident in the Clinic and remain constantly within call. All the assistants are qualified men, most of them being of some few years standing.

Besides the out-patient department there is a pathological department, with Dr. Salzman at the head, and here the more directly scientific work is carried out. The wards, lecture room and out-patient department operating theatre, waiting rooms—in fact the whole clinic, is on one floor, one room leading into another.

The out-patient department is not used by any other clinic.

By far the greater part of the operating work of this Clinic, said to number 20,000 patients annually, is in the hands of one man, and very little is distributed to the junior assistants. The student does not appear except at the lecture, although if a student applied for a position in the clinic he doubtless would not be refused, but his position would of course rank after that of the qualified assistants, and as it is not compulsory for him to attend he does not apparently recognise the necessity of doing so. One advantage, however, of this system is that all the material is used and thoroughly investigated, since so many men are at hand eager to obtain material, and having nothing else to do but to develope it.

I think that a student's position would probably be much better in a smaller town than in a large city like Vienna.

The students who have no private means, and who feel obliged to earn money directly they are qualified, often start in practice and undertake to treat poor patients free, in the hope of increasing their clinical knowledge and of rapidly becoming known in the locality in which they live. Hence the number of clinics in Germany and Austria.

In general surgery the men helping at major operations are all qualified men, and my announcement of the fact that such work was invariably carried out by the students in London was received with the greatest concern. The entire absence of anything like a front surgery lead me to enquire how such work was carried out abroad. The Rettungs Gesellschaft, or Ambulance Corps, is developed to a much greater extent than in England, and the higher branches of this organisation are really responsible for a considerable part of this work.

I had the good fortune to meet Dr. Rœdiger, the head of the association, at Frankfort, and in his company I saw a great deal of the work carried on by the ambulance department.

In the big towns two, sometimes three men, fully qualified doctors, are attached to the Fire Brigade stations, and are prepared to treat any emergency cases, or cases of minor surgery day and night.

The ambulance stations are attached to the fire stations for the reasons that they are then in telephonic communication with every part of the town, that a number of men are always available to assist, there is good stabling for the ambulance horses and wagons, the existence of the station is well known and it can be easily found.

Further, accident stations, not necessarily belonging to the ambulance corps, are scattered over the large cities. These, again, are in charge of a medical officer, and students may, if they choose, attach themselves to one of these. That part of the work which is carried out by the laity is usually entrusted to men who have served their military duties and are in the reserve force. When they join the ambulance their names and residences are registered and kept by the police, so that when an accident happens requiring the assistance of a large number of men, the police go at once to the men living in the vicinity and summon them; by this means a good number of men can always be got together. The chief depôt is at the railway station, a shed being given to them in which they store their apparatus, which is heavy and often very considerable. Of course, the reason of such elaborate organisation is in order that it may be ready for use in war; everything is arranged with a view to that end. At Frankfort one sees material necessary for transporting men from field or house to the train, apparatus for turning the ordinary goods vans and fourth class carriages into transport wagons, apparatus for dressing and treating all ordinary accident cases, and for feeding and caring for the wounded for prolonged periods.

The station-master has to place at the disposal of the corps an engine and goods vans, with fourth class carriages sufficient for their needs, whenever the occasion arises.

On Thursday, April 25th, Frankfort was startled by a series of terrific explosions, and in a short time a telephonic message was received at the railway station that the chemical works at Griesheim had been the scene of a terrible disaster. Messages were sent to the police, the ambulance men communicated with, and within an hour a train fully equipped for transporting some 40 to 50 injured people to the Frankfort hospitals had left for the scene of the disaster. All this work is under proper medical supervision but carried out by raw mechanics.

Continental nursing is very inferior to the English system, although happily exceptions are found. The various religious orders, and the red cross societies are mainly responsible for what nursing there is. In Vienna affairs are at their worst, things being in the same position as they were in England when Dickens wrote "Martin Chuzzlewit." Mrs. Gamp reigns supreme. The occupation of hospital nurse is looked upon as being synonymous with all that is coarse and indelicate. In Germany matters are better, and still better in Holland, but nowhere is the same

humanity, intelligence and discipline displayed as in London.

As much work as is possible is carried out without a general anæsthetic, a marked reluctance to use anæsthetics, and when they are being used, a sense of uneasiness and alarm was noticeable. No anæsthetic is administered without the assistance of three people, one to hold the pulse and time it, often watch in hand, another to watch the breathing and restrain the patient's struggles, while a third administers the drug. The absence of skilled anæsthetists, of proper instruction to the students, and of opportunities to practise, results in many unfortunate scenes, and great skill in performing artificial respiration.

The hospital buildings vary much; some are old and dirty, some are new and up to date.

Professor Rehn's Hospital, at Frankfort, the Polyklinik in the Zieglerstrasse, Berlin, and the Nederlandsch Gasthuis voor Ooglijders, at Utrecht were the best and most convenient buildings I saw, but none are so large or convenient as the new Moorfields Hospital.

The time and care given to theoretical teaching, the facilities offered to strangers, the number and variety of the different "Kurs," attract hundreds of students of all nationalities to Berlin and Vienna. I met no English students, however, but scores of Americans. I often asked the Americans why they came in such numbers and why they stayed so long? And I received three or four reasons—

Firstly, the prestige of having studied abroad.

Secondly, the facilities offered to absolute strangers.

Thirdly, the difficulty of obtaining material and efficient teaching at home.

Fourthly, the pleasure of a trip to Europe.

To the London student, however, the continental schools are not attractive, mainly on account of the difficulty, and sometimes almost the impossility, of coming into immediate contact with the patient. One can obtain plenty of teaching, a "Kurs" on every conceivable subject, operations on the "cadaver," laboratory work, research work, everything in fact for which one is prepared to pay; but as soon as the student wants to come to the actual patient, and treat him as a patient, he finds that he is superseded by an army of qualified medical assistants. Often one finds the American in Berlin and Vienna receiving better things than the Berliner or Viennese, because he can afford to pay more. There is an entire absence of *esprit de corps*, the average medical man, as well as the medical student, not occupying as important a social a position as in England, and the belief is forced on one that the strangers are eating the children's bread.

The conclusion that I have arrived at is that the German student is not qualified to take charge of patients when he has finished his examinations, whereas the Engish student is. One finds in Germany more purely scientific work going on, research work, laboratory work of all kinds, but it seems to me that this work should be undertaken by universities or by properly constituted scientific bodies, and not by the medical schools as part of the curriculum of the student.

Professor Starling's contentions in the *Nineteenth Century* I quite agree with, but the duty of the medical school authorities is to instruct their students how properly to combat disease with the weapons that science has already secured for us, and I believe the London medical student receives a much better, because a more practical, education than any offered to him on the continent.

ARTHUR W. ORMOND.

Nursing News.

Matron's Office.

Miss Hodges, the Assistant Matron, has been appointed Matron of the Cumberland Infirmary, Carlisle, and will shortly be leaving us to take up her duties there. Although much regret is expressed by the whole of the Nursing Staff at her departure, the good wishes of everyone will follow her in her new work.

Miss S. A. Hyland (Sister Astley Cooper), has been appointed to succeed Sister Bessie as Assistant Matron, and Miss Haughton (Sister Patience), has been transferred to Astley Cooper.

Miss Archdale (Head Nurse in Queen Ward), who entered the hospital in March, 1898, has been appointed to succeed Miss Haughton as Probationary Sister in Patience and Samaritan.

On June 13, Nurse Lowthin, Head Nurse in Dorcas ward, left the hospital on completion of her training, to take up work on the Staff of Guy's Trained Nurses' Institution. Probationer Lowe has been appointed to succeed her as Head Nurse in Dorcas.

On June 22nd, Nurse Rainbow, Head Nurse in Lazarus ward, left the hospital on completion of her training, and Probationer B. Alcock was appointed to succeed her as Head Nurse.

On July 1st, Nurse Parlby, Head Nurse in Bright ward, left the hospital after nearly four years' service.

Pass List.

University of Cambridge, May, 1901.

SECOND EXAMINATION FOR THE MEDICAL AND SURGICAL DEGREES.

Part I.—H. A. Cutler, H. P. Wiltshire.
Part II.—B. H. Stewart, F. Lindsay Woods.

Sport.

Guy's Hospital Athletic Club.

The Sports were held on the Honor Oak Ground on Wednesday, June 26th, and afforded a most enjoyable afternoon's entertainment. Harris had got the track into capital condition, the weather was perfect, and it was generally agreed that the meeting was the best we have had for many years.

Among those present were Dr. Pye Smith, and most of the members of the staff, together with many of the Sisters and other members of the nursing staff, while there was a large gathering of Guy's men, past and present, with their friends, the attendance numbering altogether some 600.

The music was provided by the band of the 3rd Kent Position Artillery Volunteers (Royal Arsenal), and was above the average for these occasions, while the catering was good, although we hope some day that the club may be able to dispense its hospitality, instead of making visitors pay for their own tea, as at present.

The donkey race was again a popular item on the card, and afforded considerable amusement. There was great variety in the methods of the various donkeys, as well as in the styles of their riders, both as regards mounting and coming off. Mr. Higgins again took part in the race, but was unable to repeat his success of last year.

The rest of the sport was also interesting, the 100 yards being won by Morgan, to whom Wadson allowed a yard, in the good time of 10⅕ seconds. The 440 yards also provided a good race, and resulted in a dead heat between Wadson and Allen, while Litchfield was well up at the finish; the last-named also ran a good race in the half mile.

Morgan's 20 feet 11½ inches in the long jump was another good effort, and he should prove a worthy competitor with Lascelles in the Inter-Hospital Sports.

It is a pity German, the scratch man in the long distance races, did not start in his events, as he should have made a good race in the three miles. Norton ran well in both the one and three miles, and his time in the former was very fair.

The handicapping worked out very well on the whole; but Collins, who won the veterans' race, was apparently somewhat leniently treated in receiving 18 yards.

Altogether, the fields were good and men were better trained than usual, Wadson especially being in fine condition. We hope that he will be successful in the three events in which he will represent Guy's in the Inter-Hospital meeting.

The bicycle races were this year omitted from the programme, which was of just the right length, carried out without a hitch, and well up to time.

Mrs. F. J. Steward gave away the prizes, and a very pleasant meeting terminated with the usual cheers.

100 YARDS.—Heat 1.—S. P. Wadson, scratch, 1; J. E. Hodson, 6 yards, 2. Time, 10⅖ secs. Heat 2.—E. Morgan, 1 yard, 1; W. H. S. Burney, 6 yards, 2. Time, 10½ secs. Heat 3.—E. O. Stevens, 4 yards, 1; J. S. Booklers, 2. Final Heat.—E. Morgan, 1; S. S. Wadson, 2. Time, 10⅕ secs.

PUTTING THE SHOT.—S. B. Layton, 28 feet, 1; L. D. Stamp, 27 feet 3 inches, 2.

HALF MILE.—G. Wacher, 70 yards, 1; P. C. Litchfield, 20 yards, 2. Time 2 min. 2½ secs.

HONOR OAK PARK SCURRY STAKES (for donkeys) about one furlong.—W. E. Lowe, 1; A. R. Ransford, 2.

120 YARDS HURDLES.—E. M. Harrison, owes 10 yards, 1; J. E. Hodson, owes 12 yards, 2. Time, 19⅕ secs.

THROWING THE HAMMER.—E. M. Harrison, 68 feet 7 inches, 1; E. C. Lowe, 2.

ONE MILE.—E. L. Norton, 60 yards, 1; A. R. Beaumont, 100 yards, 2. Time, 4 min. 47⅖ secs.

220 YARDS.—S. P. Wadson, scratch, 1; E. Morgan, 4 yards, 2. Time, 23⅖ secs.

VETERANS' RACE.—M. A. Collins, 18 yards, 1; D. H. Trail, 10 yards, 2; E. A. Longhurst, 3 yards, 3. Time, 15⅕ secs.

HIGH JUMP.—T. B. Layton, 4 feet 11 inches, 1; G. N. Bartlett and J. E. Hodson tied, 2.

440 YARDS.—S. P. Wadson, scratch, R. W. Allen, 1 yard, dead heat, 1. Time, 54⅖ secs.

LONG JUMP.—E. Morgan, owes 4 inches, 1; A. M. Roonie, owes 1 foot, 2. Distance, 20 feet 11½ inches.

THREE MILES.—T. F. Wilson, 1 min. 30 secs., 1; E. L. R. Norton, 1 min., 2. Time, 17 min. 58½ secs.

Cricket.

PAST v. PRESENT.

On Saturday, June 22nd, this match was played at Honor Oak Park, and ended in an easy victory for the Past. The Past batted first on a rather slow wicket, making a fairly good total of 233, Hancock playing a useful innings of 84; but the Present, on going in were unable to get anywhere near this score, being all out for just over the half century. On following on they did rather better in making 99 for six wickets. Ingram took 7 wickets for 31 in the first innings of the Present. Graham-Smith was in good form behind the wicket, being the means of dismissing five of the opposing batsmen. Scores:—

PAST.

W. J. Hancock, c Barber, b Foster	84
K. B. Alexander, c Graham-Smith, b Cowper	18
C. Francis, c Graham-Smith, b Foster	14
R. Ingram, c Graham-Smith, b Wetherell	31
F. J. Nicholls, c Graham-Smith, b Wetherell	1
F. C. Wetherell, c Graham-Smith, b Wetherell	37
T. C. Bowle, b Wetherell	2
E. D. Hancock, not out	21
F. D. S. Jackson, b Morgan, b Wetherell	4

F. W. Sime, b Cowper	0
A. C. Causton, c Cowper, b Wetherell	6
Extras	15
Total	233

Present.

1st Innings.		2nd Innings.	
F. Morres, c Nicholls, b Ingram	9	c W. Hancock, b Francis	28
H. Barber, b Ingram	5	c W. Hancock, b F. C. Wetherell	19
H. M. Langdale, b Hancock	14	c Alexander, b F. C. Wetherell	6
R. C. Poyser, b Hancock	0	b F. C. Wetherell	0
G. T. Graham-Smith, not out	12	c Alexander, b Nicholls	11
M. C. Wetherell, b Hancock	3	c Francis, b Bowle	15
A. R. Wilson, b Ingram	1	not out	10
A. L. Foster, c Nicholls, b Ingram	0	not out	8
H. R. Grellet, st Alexander, b Ingram	8		
E. Morgan, lbw Ingram	0		
C. M. L. Cowper, b Ingram	2		
Extras	2		4
Total	56	Total for 6 wkts	99

GUY'S v. UNIVERSITY.

Cup Tie.—Semi-Final Round.

On Tuesday, June 25th, Guy's played their second match in the Cup Tie, at Winchmore Hill, winning easily by 364 runs and 5 wickets. University went in first, and were all out before lunch for 102; on Guy's going in the runs were soon knocked up, Graham-Smith and Wetherell each playing innings of over a hundred. Barber was unfortunate in hurting his back and having to retire. This win enables us to meet St. Bartholomew's in the Final, which will in all probability be played at Honor Oak Park on July 11th and 12th. Scores:—

University Hospital.

C. C. Rushton, c Barber, b Cowper	8
A. H. Lawrence, c Wilson, b Cowper	5
L. H. Alexander, b Wetherell	19
C. F. Hardie, c Wilson, b Foster	0
R. C. Merryweather, c Wyatt, b Foster	4
W. K. Ligassick, b Foster	0
A. C. Fletcher, c Wilson, b Wetherell	26
W. F. Corfield, b Morgan	16
W. L. Scott, b Morgan	0
L. C. Thompson, b Morgan	6
J. C. Mottram, not out	0
Extras	18
Total	102

Guy's.

H. D. Wyatt, b Merryweather	62
H. Barber, retired hurt	31
H. M. Langdale, c Ruston, b Merryweather	11
R. C. Poyser, c Merryweather, b Hardie	21
G. T. Graham-Smith, not out	118
F. Morres, c Corfield, b Ligassick	15
A. R. Wilson, c Rushton, b Corfield	57
M. C. Wetherell, not out	102
Extras	53
Total (5 wickets)	468

A. L. Foster, E. Morgan and C. M. L. Cowper did not bat.

GUY'S v. HAMPSTEAD.

This match was played at Hampstead on Wednesday, June 26th, resulting in rather an easy win for the home team. Guy's batted first, putting together a total of 223, but this score was passed by Hampstead after the fall of the fourth wicket, Ashan-al-Hak and Stoddart making a long stand for the first wicket. Scores:—

Guy's.

H. D. Wyatt, b Hebert	7
G. S. Graham-Smith, c Rowley, b Stoddart	19
H. M. Langdale, c Freeman, b Stoddart	33
F. Morres, b Ashan-al-Hak	39
R. C. Poyser, b Ashan-al-Hak	0
M. C. Wetherell, b Stoddart	13
T. C. Bowle, run out	5
E. A Collins, b Stoddart	40
H. R. Grellet, not out	41
C. M. L. Cowper, b Stoddart	0
E. H. B. Milsom, b Stoddart	0
Extras	26
Total	223

Hampstead.

Captain Black, b Graham-Smith	7
Ashan-al-Hak, c Wyatt, b Poyser	102
A. E. Stoddart, c Langdale, b Poyser	56
E. E. Barnet, c Wyatt, b Poyser	11
F. Rowley, st Graham-Smith	33
T. M. Farmiloe, st Poyser, b Wetherell	31
H. R. Hebert, not out	23
Extras	21
Total (6 wickets)	284

L. G. O. Besch, H. J. J. Freeman, J. M. Figgis and G. A. Girdlestone did not bat.

GUY'S v. REIGATE PRIORY.

The return match with this club was played at Honor Oak Park on Saturday, June 29th, and resulted in a win for Guy's by 143 runs. Reigate went in first, but were dismissed for the moderate total of 130, Wyat taking six wickets for 33. Guy's responded with a score of 273, leaving Reigate half-an-hour to bat, in which time they lost three wickets for 44. Scores:—

Reigate Priory.

T. H. F. Widgress, b Wyatt	35	c Wilson, b Langdale	9
F. J. Nightingale, b Cowper	15	not out	9
H. B. Walters, b Cowper	0	not out	11

E. H. Harrison, lbw Wyatt	39		
C. Dalton, lbw Wyatt	0		
R. B. Sparrow, c Langdale, b Wyatt	10		
R. H. Withall, c Wilson, b Chignell	11	st Collins, b Booklers	7
G. B. Wilson, lbw Wyatt	3	c Langdale b G. Smith	0
F. C. Morrison, b Wyatt	5		
L. M. Waldron, b Chignell	4		
— Brickett, not out	4		
Extras	4		8
Total	130	for 3 wkts	44

GUY'S.

H. D. Wyatt, st Walters, b. Withall	54
G. S. Graham-Smith, b Brickett	39
H. M. Langdale, b Withall	64
E. A. Collins, lbw Brickett	1
A. R Wilson b Withall	0
T. A. Chignell, c and b Dalton	21
S. C. Bowle, b Waldron	48
E. Morgan, b Dalton	16
J. S. Booklers, c Sparrow, b Withall	0
C. M. L. Cowper, not out	12
H. Bacon, b Brickett	0
Extras	18
Total	273

GUY'S 2ND XI. v. REIGATE PRIORY 2ND XI.

Played at Reigate on June 29th, with the result that we experienced our first defeat of the season, the obvious cause being the fact that only four of the regular team were playing, and all the bowlers were away. Scores:—

GUY'S.

H. M. Tolhurst, lbw b Budgen	17
A. H. Turner, b Tomsett	23
R. Willan, b Tomsett	24
H. J. Palmer, b Tomsett	2
P. N. Bartlett, b Budgen	6
B Wedd, b Budgen	30
C. D. Pye-Smith, lbw b Budgen	4
J. Goss, b Tomsett	1
F. C. Robinson, b Richardson	25
Burney, lbw b Tomsett	2
Bennett, not out	18
Extras	14
Total	166

REIGATE.

T. Nightingale, c. Palmer, b Wedd	26
H. Dungate, b Palmer	39
B. T. Kenward, b Tolhurst	13
E. W. Richardson, c Turner, b Goss	21
H. Budgen, not out	72
F. J. Buckland, not out	24
Extras	5
Total (4 wickets)	200

Gallier, Wemmall, Douglas, Burtenshaw, Tomsett, did not bat.

GUY'S 2ND XI. v. MERCHANT TAYLORS' SCHOOL.

Played at Honor Oak Park on Wednesday, July 3rd, and resulted in a very easy win for us, our opponents giving a very poor display of both batting and bowling. Scores:—

GUY'S.

H. M. Tolhurst, c Dobbs, b Wimbush	35
A. H. Turner, b Sayers	5
T. A. Chigwell, run out	39
J. Booklers, not out	76
E. Cohen, c Sayer, b Wimbush	4
W. H. Bush, b Smith	1
H. T. Palmer, b Smith	29
E. W. Strange, c Sayer, b Smith	20
T. E. Holmes, not out	35
Extras	13
Total (7 wickets)	*257

C. D. Pye-Smith and G. Carlisle did not bat.

* Innings declared closed.

MERCHANT TAYLORS' SCHOOL.

Crawford, b Chignell	2
Wakeford, st Turner, b Chignell	0
Cowan, hit wicket, b Chignell	3
Dobb, lbw, b Booklers	12
Lepingwell, c Pye-Smith, b Chignell	0
Smith, b Carlisle	9
Hutchinson, lbw, b Chignell	0
Wimbush, c Tolhurst, b Chignell	17
Willett, b Carlisle	4
Evans, c Booklers, b Carlisle	2
Sayer, not out	0
Extras	8
Total	57

Guy's Hospital Swimming Club.

INTER-HOSPITAL POLO CUP.—1ST ROUND.

GUY'S v. ST. MARY'S HOSPITAL.

This match was played at Southwark on Thursday, June 20th, before a good number of spectators. Mary's won the toss and defended the deep end. Moon opened the scoring shortly after the start and quickly followed this up with another goal. Guy's continued to press, and before the interval Ransford scored another goal for them.

After the interval Mary's played up hard and before the end scored two goals, but were unable to equalise, and Guy's won a good game by 3 goals to 2. For Guy's, Moon and Grose were very good forward, and Bacon was excellent in goal. Nesfield played a great game at back for Mary's. Team—

GUY'S.—H. Bacon (goal); L. Cameron, R. L. Green (backs); L. V. Ransford (half-back); A. S. Moon, H. N. Grose, R. B. Dawson (forwards).

GUY'S v. GRAFTON.

The return match with this Club was played at Southwark, on June 24th, and ended in a victory for the Hospital, after a scrambling game, by four goals to one.

Guy's Hospital Lawn Tennis Club.

PAST v. PRESENT.

This match was played on Saturday, June 22nd, and resulted in a win for the Present by eleven matches to three. The Past were unfortunately rather weak, but there were some excellent matches, particularly in the singles, which resulted as follows:—E. N. Jupp lost to H. K. Lacey, 6–1, 4–6, 3–6. B. A. Wedd beat E. W. Goodall, 4–6, 6–2, 6–4. T. C. Lucas beat C. E. Michael, 6–1, 2–6, 6–4. T. A. Chignell beat F. E. Fremantle, 6–0, 6–4. C. H. Winckworth beat O. H. Card, 6–8, 6–2, 6–4. J. S. Steele-Perkins beat K. W. Goadby, 6–4, 6–3.

In the doubles the results were as follows:—Jupp and Winckworth lost to Lacy and Michael, 3–6, 4–6; beat Goodall and Card, 6–1, 6–1; beat Stephens and Goadby, 6–1, 6–1. Wedd and Lucas lost to Lacey and Michael, 4–6, 5–7; beat Stephens and Goadby, 6–4, 6–0. Fremantle and Chignell beat Goodall and Card, 7–5, 6–4; beat Stephens and Goadby, 6–2, 6–0.

INTER-HOSPITAL CUP TIE.

GUY'S v. ST. THOMAS'S.

This match was played on June 20th, at Chiswick. We had drawn a bye in the first round, and St. Thomas's had defeated St. George's. The result was a very easy win for St. Thomas's by nine matches to one. Guy's had the misfortune to be without Bacon and Cooke, so that two pairs had hardly played together before, which may partly account for the very feeble display given. In the singles Wetherell secured the only win. Result:—E. N. Jupp lost to Boycott, 3–6, 1–6. B. H. Wedd lost to Hudson, 2–6, 4–6. T. C. Lucas lost to Carver, 4–6, 4–6. P. C. Bent lost to C. H. Latham, 0–6, 2–6. C. H. Winckworth lost to Barton, 1–6, 1–6. M. C. Wetherell beat G. H. Latham, 2–6, 7–5, 6–1.

Doubles—Wedd and Lucas lost to Carver and Hudson, 3–6, 2–6. Jupp and Bent lost to Boycott and Barton, 3–6, 6–2, 3–6. Wetherell and Winckworth lost to Latham and Latham, 3–6, 2–6; lost to Carver and Hudson, 2–6, 2–6.

GUY'S v. THE STAFF.

This match was played on Wednesday, July 3rd, and resulted in a victory for Guy's by seven matches to two.

A comparison of the games shows better how close most of the matches were, the Staff securing 116 to our 121. The presence of several ladies, who most kindly came down and dispensed tea, added greatly to the enjoyment of a very pleasant afternoon. The results of the matches were as follows:—E. N. Jupp and H. C. Winckworth beat Drs. Fawcett and Spriggs, 9–7, 7–5; lost to Dr. Stevens and R. H. J. Swan, 4–6, 3–6; beat Drs. Cleveland and Morris, 10–8, 3–6, 6–2. B. H. Wedd and T. C. Lucas beat Fawcett and Spriggs, 7–5, 6–4; beat Stevens and Spriggs, 2–6, 8–6, 8–6; beat Cleveland and Morris, 3–6, 8–6, 6–4; H. Bacon and Pinching beat Fawcett and Spriggs, 7–5, 7–5; lost to Stevens and Swan, 2–6, 1–6; beat Cleveland and Morris, 6–3, 2–6, 6–2.

Inter-Hospital Athletic Sports Meeting.

The Annual Inter-Hospital Athletic Meeting will be held at Stamford Bridge Grounds on Wednesday, July 17th. The following is the Hospital team:—

100 YARDS.—1. S. P. Wadson; 2. E. Morgan.

SHOT.—1. J. T. Hicks; 2. A. Zorab.

HALF-MILE.—1. R. W. Allen; 2. P. C. Litchfield.

HURDLES.—1. E. M. Harrison; 2. J. E. Hodson.

HAMMER.—1. E. M. Harrison; 2. C. J. Pinching.

ONE MILE.—1. H. B. German; 2. E. L. R. Norton.

220 YARDS.—1. S. P. Wadson; 2. E. Morgan.

HIGH JUMP.—L. V. Ransford.

440 YARDS.—1. S. P. Wadson; 2. R. W. Allen.

LONG JUMP.—1. E. Morgan; 2. A. M. Roome.

THREE MILES.—1. H. B. German; 2. A. R. Beaumont; 3. O. B. Travers.

The heats for the 100 yards, 220 yards, 440 yards, and hurdles, will be run at Stamford Bridge, on Monday, July 15th.

Births.

CLOWES.—On June 26th, at Coggeshall, the wife of William F. A. Clowes, M.R.C.S., L.R.C.P., of a son.

DAVIES.—On June 4th, at Vale House, Greenwich, the wife of Hugh Davies, F.R.C.S. Eng., M.B. Lond., of a son.

KEMP.—On June 24th, at Worksop, Notts, the wife of G. Lajus Kemp, M.D. Lond., of a son.

Marriage.

BIDDLE–SYMONDS.—On June 27th, at the English Church, Paris, by the Rev. H. E. Noyes, D.D., Hon. Chaplain to His Majesty's Embassy, Paris, Henry G. Biddle, M.R.C.S., L.R.C.P., of 6, Chandos Place, Broadstairs, to Beatrice Frances Symonds, youngest daughter of the late J. G. Symonds, of Woodside, Sevenoaks.

ED.—F. G. G.

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Notice.

All Communications, Articles, Letters, Notices, and Books for Review, should be forwarded, accompanied by the name of the sender, to the Editor, GUY'S HOSPITAL GAZETTE, *Guy's Hospital, S.E.*

Any of our Subscribers who may be desirous of having their numbers of the GAZETTE *bound should leave them with the Librarian.*

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The charge for binding in blue, with the Arms of the Hospital in gold will be ONE SHILLING AND SIXPENCE.

Calendar of Coming Events.

July, 1901.

Sat. 20.—Messrs. Jacobson and Fripp's take-in; Drs., W. Collins Lewis and F. L. Thomas; Cl., J. A. Glover.
G.H.C.C., II. v. Hos.-Scho., home.
G.H.L.T.C., II. v. Basingstoke, home.

Mon. 22.—Exam. for Junior and Senior Prizes for General Proficiency and for the Beaney Prize in Pathology.

Tues. 23.—First Conjoint Exam. begins.

Wed. 24.—1.30 p.m., Clinical lecture by Dr. Washbourn.

Thur. 25.—Lectures cease.
Messrs. Howse and Symonds' take-in; Drs., F. M. V. Smith and O. B. Travers; Cl., G. Clarke.

Fri. 26.—Exam. in Operative Dental Surgery.
Exam. in Dental Microscopy.

Sat. 27.—Summer Session ends.
G.H.L.T.C., v. East Croydon, away.

Guy's Hospital Gazette.

JULY 20, 1901.

The Presidency of the Royal College of Surgeons.

WE feel sure that every Guy's man will join with us in congratulating Mr. Howse on being elected President of the Royal College of Surgeons of England. We take it as an honour to Guy's, and have reason to be proud of our Senior Surgeon. It is also very gratifying to know that the selection has the approval of surgeons generally. Indeed, no one who knows Mr. Howse's value as a chairman, his knowledge, his open-mindedness, his readiness to accept suggestions of others, and his originality, can for a moment doubt the wisdom of the appointment. It is a fitting crown to over thirty years of work, chiefly for the benefit of Guy's Hospital and its Medical School. Those who can recall the early seventies will remember the condition of Surgery in our own and in other hospitals. Erysipelas was rife, pyæmia common, and the death-rate after operations excessive. Mr. Howse, after his visit to Lister in 1868, introduced antiseptic surgery into Guy's and into London, and may be looked upon as the pioneer of this great movement in the London hospitals. In 1873-4 the almost invariable success of his excisions of the knee attracted the attention of surgeons outside Guy's, and while others amputated tubercular knees, then called "pulpy disease," Mr. Howse excised them, and with wonderful success for those days Such confidence had he in the spray and all attendant accessories, that he performed such operations as amputations in bed next to erysipelas cases, and by his care and methods freed the patients from risk.

In those days he cleaned the skin with liquor potassæ, and does so still. Those of us born into the elaborate methods of to-day cannot conceive of the magnitude of this success, or appreciate the boldness and confidence it required.

When we see Mr. Howse still adhering to the spray some of us are inclined to look upon it as old-fashioned; perhaps it is, but we doubt if any living surgeon can show thirty years' surgery freer from septic complications, and we doubt if any operations do better to-day than those in Mr. Howse's wards.

Mr. Howse is less widely known than many other surgeons of smaller experience, but no hospital has ever had a more devoted officer, and no school a more faithful teacher. His labour for the advancement of University education, as shown by his long service on the annual committee of the University of London, culminating in his present position in the Senate, indicates the time he has devoted to the interests of the medical student.

We have looked up the white volume of the London University, and here we find his name over and over again among the alumni. When the Gold Medal for the M.S. was rarely awarded, Mr. Howse, we note, shared the distinction with Mr. Marcus Beck. It was, we believe, with this surgeon that he visited Lister's wards, and so these two introduced the method into London.

We are not writing a memorial, and have only recalled these few among many things that might be said, to let our younger men know how much our Senior Surgeon has done for Surgery. He was the first to excise varicose veins, reviving an operation abandoned at the early part of the century, because of the terrible death-rate. He placed gastrostomy upon a safe basis, and the "Method of Howse" is quoted to this day.

We must conclude in again offering our sincere congratulations, and just as we end these remarks we fancy we have heard that the Coronation is fixed for June in next year, and we have heard of honours being distributed on such occasions.

On the Treatment of Bright's Disease.

CLINICAL LECTURE BY Dr. HALE WHITE.

June 19th, 1901.

Gentlemen,—I chose the subject that we are going to take to-day partly because I think it is a good thing to sometimes devote a lecture to the treatment of cases, and also because it seemed to me that Bright's disease is particularly a disease for which you can often do a great deal of good if you treat it properly. And I need hardly say, before beginning, that the first thing always is to make sure that it is Bright's disease from which your patient is suffering. You can easily imagine that if your diagnosis is wrong, the treatment often does no good, and may possibly do absolute harm.

Acute Bright's Disease.—I think we had better, first of all, take Acute Bright's disease, because the treatment of that differs entirely from the treatment of other forms. Acute Bright's disease, at any rate, in its most acute form, is decidedly a rare malady, and I think the first thing for you to bear in mind when you have a case before you is, that if you treat the patient properly there is a very fair chance indeed that he will completely recover; if you do not treat him properly, there is a very strong chance, almost a certainty, that he will gradually lapse into what we all see so constantly in the hospital—there are two instances in John ward of it—the condition commonly known as a large white kidney. The proper treatment of acute Bright's disease means absolutely life to the patient. With many diseases that is not so. For instance, take the case of carcinoma of the liver. That will kill whether you treat it or not. But in acute Bright's disease it is a matter of life or death whether you treat the patient properly or not.

The next thing to remember, to treat cases of acute Bright's disease successfully, is that there is a most striking connection, which you know from your physiology, between the skin and the kidneys. Every student knows that if his skin works considerably, his kidneys will work less, and *vice versâ*. Therefore, clearly you want to keep the skin, when the kidneys are diseased,

working as uniformly and as well as possible, and with that in view, altogether apart from the disease being an acute disease, put the patient to bed. In no position is your skin maintained in such a uniform temperature as when you are in bed. So that, remember, you must put these patients to bed, absolutely to bed. If allowed to get up they will very likely go downhill. I have known cases of acute Bright's allowed to get up before they should, with the result that they have been dead in a few days. A little cold wind blows upon the skin, contracts up the vessels, throws a large amount of work on the kidneys, which they cannot perform, and the patient becomes uræmic and dies.

Because, again, you wish to keep your patients at a uniform temperature, you should have your room at a uniform temperature, something about 65 degrees. Moreover, because you wish to make the skin work well, you should clothe the patients in flannel. If you have a really severe case, it is not a bad thing at all to get rid of the sheets altogether and allow him to lie in blankets. Before leaving this part of our subject, again let me impress upon you the importance of not letting your patient get chilled. Nothing can be worse, for instance, than letting him get out of bed without a dressing-gown and go upstairs to the water-closet or the bathroom, and on his way pass some open window where the cold wind is blowing in and thoroughly chills him, thereby placing extra work upon the kidneys.

Next, as to his diet. You should most emphatically put him upon milk diet, and nothing but milk. The reasons for that are three. In the first place it is a simple diet, and as the kidneys work very imperfectly in acute Bright's disease, you ought to give them as little work as possible to do. Therefore give some plain, simple food. Milk is a natural, light, plain diet, which probably gives the kidneys as little work as anything can do in the way of food.

The next advantage of milk is that it is a fluid diet. All water is a diuretic, more or less, and when you drink more you increase the flow of urine, and it is a good thing to wash the tubules out in acute Bright's disease, because they are clogged up with epithelium and debris, and the more you can wash them out the better. When once the disease is established, it shows that your treatment is doing good if the patient is passing plenty of casts. I do not like the number of casts in the urine to fail too soon, because it shows that the dead epithelium is not being cast off in the tubules as it should.

And then acute Bright's disease is a fever, and I have often taught you in the wards why it is a good thing to give fever patients milk, namely, because experimental pathology has shown that a diet containing plenty of carbohydrates effects a saving in the destruction of albumen and fat that goes on in fever, and also because the digestive secretions cannot in fever deal with complex foods. Therefore, because cows' milk probably contains a less number of irritants of the kidney than any other food you can get, and because it is a diuretic, and because for reasons of general pathology, it is a good thing for fever generally, therefore it is a good thing in acute Bright's disease.

I told you just now that you want something to wash the tubules out. You must not give drugs for that purpose. No sane person would think of stimulating an organ that wanted rest. What would you think of a man who, in the acute stage of infantile paralysis, said, "If you want to get these muscles well you must make the child run about?" The essential treatment is rest; therefore, above everything, avoid giving stimulating diuretics to a patient suffering from Bright's disease. You want, if possible, to gently increase the flow of water through his kidneys without stimulating the organ at all by drugs.

Many people give water largely, and, no doubt, to wash away the dead epithelium in the tubules it is a good thing. But you must not give an indiscriminate amount of water—for instance, five, six or seven pints a day—in order to wash out the tubules; because it is a fairly well known fact that large amounts of fluid are bad. If you talk to the public, you will find it is a distinct impression that excessive drinking of water impaires health. Quite recently a number of accurate experiments have been made to test

this point, and they are so interesting, that I jotted down the facts. They formed a research carried out by Dr. Edsall, and he gives not only the figures that he obtained himself, but those furnished by several other experimenters. He refers to four experiments carried out by other experimenters, and says, speaking of the daily loss of nitrogen caused by excessive water drinking: "The effects in the four persons were therefore relative losses of 1·6 grm., 1·9 grm., 0·8 grm., and 2·8 grm., respectively; the effect being in general even more striking than in my subject." Further, he says: "And since this work and my own constitute the only extended observations of this kind upon human beings, I feel justified in asserting that practically all the satisfactory evidence at hand shows a decided increase in metabolism when water is drunk in excess. . . . The figures I have given for the relative nitrogen loss seem slight in themselves, but the actual effect upon the tissues is better recognised by translating these figures into the corresponding ones for muscle proteid. If, then, we take Ter-Grigorianz's results in working upon himself, we see that he lost each day, as the effect of the immoderate use of water 2·8 grm. of nitrogen, which is equivalent to about 17·5 grm. of muscle tissue. In one week this would amount to 122·5 grm., or practically speaking to 4 ozs., and a quarter of a pound a week is certainly not a negligible quantity." So that you see that while you may give a fairly large amount of water with the object of washing out the tubules, do not carry it to a very great excess, because if you do so you will so increase the nitrogenous metabolism in the body, that there will be a loss of muscle at the rate of nearly four ounces a week.

A very good form, by-the-bye, of giving milk is that of Koumiss, for it is a pleasant refreshing drink. It is virtually milk that has been allowed to undergo alcoholic fermentation. You can get it at many dairies. It is a national drink amongst the Cossacks in the Southern Steppes of Russia. The alcohol which it contains is only about 2 per cent.; but alcohol, beyond that amount, you must distinctly avoid in acute Bright's disease. Alcohol, we know, throws a large amount of work on the kidneys, and, therefore, people with acute Bright's disease should take but little alcohol. In the same way I need hardly repeat that they must not have heavy foods or strong diuretics, and of all diuretics you must particularly avoid cantharides and turpentine in Bright's disease. In some cases a cantharides plaster has been put on people suffering from this disease, and they absorb the cantharidine, which is excreted by the kidney, and the disease is made very much worse. I remember, years ago, a patient was admitted with hæmaturia in Bright's disease, and the clinical assistants were trying to stop the bleeding by giving turpentine, forgetting that turpentine acted on the kidneys. Immediately they were reminded of the effect of turpentine the mistake was corrected. I mention this in order to put you on your guard against making mistakes of that sort.

If you want to do anything locally, I think the best thing is to dry cup the patient. It is not a difficult process, and whether or not it does any good, it is inconceivable that it can do any harm. You have seen it done in the wards.

Again, it follows on what I have told you about the association between the skin and the kidneys, that it is very important indeed to get the man to sweat properly. The urine often falls to five or six ounces in twenty-four hours, and you want to make up for the deficiency by making the patient sweat. Therefore, perhaps every night he should have a hot bath. If there is a bathroom near the room in which he sleeps, so that he does not run any risk of getting cold, I know no objection to his having a hot bath, provided that immediately afterwards he can get into bed and have the blankets wrapped round about him to make him sweat. If he is too ill to leave his bed, or doing so exposes him to chill, one of the best things is to give him a hot-air bath. A large cradle is put over the patient, blankets are put over that, and some form of heat is put under the cradle, such as a spirit lamp, to heat the air and make the patient sweat. In some places they throw an asbestos sheet over the cradle, and that not letting any heat out, quickly makes the man sweat profusely. You may find it possible to put several

powerful incandescent electric lamps under the asbestos sheet, and then the man will sweat very abundantly.

Another way of getting rid of the excretions of the body, and therefore relieving the work of the kidneys, is by the bowels, and therefore it is highly important to make them work properly. What you want is a watery motion, so as to carry away much fluid excretion, and so relieve the kidneys. Consequently there is no better purgative than compound jalap powder: 40 grains is a good dose. Another good way of obtaining the same result is by giving 120 grains of sulphate of magnesium in a saturated solution. The jalap powder should be given every night, the magnesium the first thing in the morning.

Very often, I think, it is desirable to give some weak alkaline medicine, because by making the urine alkaline, the fatty casts will the more easily come away. The casts are fatty, and giving the medicine will form a soap which will enable the casts to be discharged. Twenty grains of potassium acetate or potassium citrate every four hours will be useful, and such doses of such bland diuretics can hardly damage the kidney.

Having adopted treatment such as I have tried to indicate, go on with it so long as the albumen is diminishing; the man must, if possible, be kept in bed until the albumen has gone, when he will probably be cured.

Now let us suppose that after keeping him in bed two or three months the albumen is gone, what will you do? You will let him get up. Then the essentials of treating him are to make the skin act; he should always wear a quantity of flannel; he should be kept in a warm room; the first day he goes out he should wear a great thick coat; he should have a warm bath at night, and immediately after it jump into the blankets so as to sweat well. Continue to keep the bowels thoroughly well open with the purgative I mentioned. Above everything you must avoid chill.

You will say, "He always wants to know where he should go." There is no hocus-pocus about that. If it is summer-time, nowhere in Great Britain will he be warmer than in Devonshire or Cornwall. Select some place where he will not get strong easterly winds. You must make him wear plenty of clothes. He should be in a warm climate, because if he gets chilled the first thing that will happen is sudden contraction of the vessels of his skin, and another reason for a warm climate is that he should always be gently sweating. When it comes to the winter, there is no place in the world better than Egypt for him, because though the temperature is about 90 to 96° in the shade, the relative humidity is often down to 15 per cent. So that with that high temperature the man is constantly sweating, and the sweat is evaporated so quickly that he has none of the discomforts that we all know of who sweat profusely in a moist temperature. I have indicated two kinds of climate—one for summer and one for winter. For those people who cannot afford to go to the places which I have mentioned, you must choose as nearly similar a climate as you can. So far, then, the treatment to be adopted is: keep the patient warm, avoid chill, keep the bowels open, avoid big meals, throw as little work on the kidneys as possible, let the patient take a hot bath two or three times a week.

Now, supposing the albumen does not altogether go, then after it has remained stationary for some weeks, you will have to say to yourself, "Well, I am afraid this is going to be incurable." There are just a few tubules that do not seem able to get well, and, therefore, they let albumen through." In that case you had better get the patient up, and treat him as I have just recommended. It is surprising how these people, if they are well to do, and can afford to go out of England in winter, and to live the kind of life I have indicated to you, will go on, years and years, and you hardly know there is anything the matter with them. Every morning they had better take some saline purgative, such as Æsculap water, so as to ensure that every morning there shall be a watery evacuation of the bowels. If they are very anæmic they will want a little iron, but as a rule, no drugs are necessary. They will ask you as to the dietary. The essential thing is for the diet to be simple, and for the

meals to be frequent and small rather than many and large. It must be a great effort to the kidneys, for instance, to get rid of all the high-seasoned food that one takes, say, at a city dinner; this can only be harmful to the man with Bright's disease.

CHRONIC TUBAL NEPHRITIS.—The subject of acute nephritis has taken longer than we thought, and we must now pass on from the man who is nearly cured to those patients, of whom unfortunately we see so many here, that have become incurable, and are suffering from extensive chronic tubal nephritis. This class of patient has what is known as a large white kidney, together with much œdema, fluid in his pleural cavities, ascites, and so forth. I think that the great thing for these people is for you to recognise that they are incurable, and not to go on dieting them in the hopes that it will do them some good. On milk diet their condition will get worse and worse, because there is no doubt that milk diet month after month is very depressing and monotonous. Consequently, if they are brought in here having had milk diet for weeks, we let them take meat or anything that they like, provided that the food is plain and big meals are avoided. Meat acts as a kind of stimulant to the whole body, and the patients feel very much the better for it. Meat extractives are, you know, excellent cardiac stimulants. Do not trouble much about the diet. It is not worth while spending your last few months in this world on milk only.

You will not, of course, give these patients alcohol, because there is no need for it, and it irritates the kidneys. But you will give them plenty of drink with the object of washing out the tubules as much as possible. Again, you will keep the bowels open by watery purgatives, but not give them any diuretics. You will give them warm baths, and clothe them in flannel, and keep them in bed, except in the summer, when they may get up a little, because you have got to recognise that they are incurable. If they wish to get up very much in the winter, keep them in a warm room. Give them hot-air baths, or hot-water baths, as the case may be. If they are very anæmic they will be much better for some iron.

Then, with regard to their dropsy, you can relieve them very much indeed by puncturing. Ten years ago I used to tell you not to do it, because œdematous tissues are particularly liable to septic infection and erysipelas. Now, you can do it, because you have got thoroughly grounded in the principles of aseptic surgery. I do not know any operation in surgery, not even the opening of the abdominal cavity, which requires more careful aseptic precautions than the puncturing of œdematous limbs. Therefore, before puncturing the legs the needle must be carefully boiled, the skin carefully cleaned, and some antiseptic gauze or sterilised lint must be wrapped round the leg after the punctures are made for the fluid to drain into. If you can have the legs depending over the edge of the bed, so much the better, if not, you can raise the head of the bed with blocks. By either method the quantity of fluid flowing from the legs will be increased.

If the pleural cavity is full of fluid, tap that; if the abdominal cavity is full of fluid, tap that; but you must be strictly aseptic in what you do. These patients, taking but little exercise, can without harm contain much fluid, so do not worry by tapping unless there is a considerable amount of fluid.

With regard to medicines. What these poor creatures suffer from as much as anything is cardiac failure. Therefore you will not keep them on what is to the heart a depressing diet, such as milk only, but let them have meat, which is more stimulating, in fact, ordinary food; and you can give them nux vomica and caffein for their cardiac failure. These are the points of treatment to bear in mind for patients with a large white kidney.

CHRONIC INTERSTITIAL NEPHRITIS.—Now let us take quite a different class. As you know, most patients with granular kidney have never had any previous acute Bright's disease at all, and this is a very common condition for you to have to treat. I think if you do not mind we will leave diet for a moment because we shall speak of that afterwards. When a man who comes before you has a granular kidney, you know from the albumen in his urine, and other

symptoms, that the kidney is not working as well as it should. You know that his chief danger is uræmia. You know that uræmia is caused, either by a failure to get rid, through the kidneys, of something you ought to get rid of—we do not know what—or by an auto-intoxication owing to the perverted internal secretion of the kidneys. But in either case, we neither know the poison nor its antidote. The treatment for chronic Bright's disease is thus obvious. We have got to give the man such general directions that as the kidneys are not excreting properly, the rest of his excretory organs shall work properly. You will tell him, far instance, to be warmly clothed, to live in a warm climate. If he is a man of means he cannot do better than go about from one part of the world to another, seeking a warm, sunny climate. You will tell him always to take gentle exercise, never as much as to tire himself, but just enough to make him perspire gently. It is not at all a bad thing for him to put on flannel underclothing, and walk up a hill, provided that at the top he does not subject himself to chill. Your object in sending him to a warm climate is to ensure that his skin shall constantly act well. In the same way, he may take a Turkish bath from time to time, provided he does not get into such a hot room that he is liable to cardiac failure. You should not let him, after a Turkish bath, have too cold a douche, or too cold a swim, so as to contract his vessels too much.

Then again, as the kidneys, which usually get rid of the products of metabolism, are diseased, it is all that the body can do to get rid of those products that ought to pass through the kidneys. Therefore do not increase the patient's metabolism too much. He must not work too hard; he must have just enough work to keep himself interested, so that he may not become a chronic invalid. Nothing is better than that he should travel about gently and quietly. He must clearly have no sudden strain. Therefore if he is on the Stock Exchange, he better retire. He should lead an ordinary quiet placid life. Of course he must keep the bowels thoroughly well opened, so as to keep the excretions working in that direction, and therefore he better have a saline purgative every morning, because that leads to a watery motion.

Now to come to the diet that these patients should have. You must make the diet for people with chronic Bright's disease depend on the state of the pulse and heart. The reason for that is this. We know perfectly well that the extractives of meat are powerful cardiac stimulants. If you take a frog's heart on a plate, and it has almost ceased to beat, and you paint it with a little strong beef-tea, the beats will recommence. The reason why I like to give beef-tea to patients with chronic Bright's, is because it is a cardiac stimulant, and has none of the disadvantages of alcohol.

So remember what you want to do is to divide the people with Bright's disease into two classes, those in whom the heart is hypertrophied and the pulse-tension is high, and those in whom the effect of the Bright's disease has been to weaken the action of the heart, and the pulse-tension is low and the pulse is feeble.

The man with a hypertrophied heart and a high tension pulse, goes about with his life in his hands, because any moment he may get a cerebral hæmorrhage. You do not want to give him cardiac stimulants, but such diet as will depress the action of the heart. Therefore, meat once a day is ample for a man like that. He must have small feeds at frequent intervals, rather than large feeds at few intervals, and little meat. He should, for instance, have bread and milk, and toast and butter for breakfast, bread and butter and some cheese in the middle of the day, some afternoon tea, and one course of meat only in the evening, and no soup because of all the extractives in it. All his meals should be small. Thus you will keep his pulse-tension down as much as you can. Alcohol is so much poison to him, for its effect is to put the cerebral vessels on the strain. It is a well known fact that most cases of cerebral hæmorrhage occur after meals. Therefore, the man with a high-tension pulse and a hypertrophied heart ought to have a light diet, very little meat, never much food at a time, no alcohol, and no big feeds such as are given at dinner parties.

But take the man whose heart is failing as a result of Bright's disease, and has a feeble

impulse. He wants just the reverse. Nothing would be more cruel than to give him a light diet. He feels weak and miserable, and has no energy for anything. He should therefore have meat for his breakfast, and lunch and dinner, and you may let him have a little alcohol, whiskey and water, twice a day. Be guided entirely by the state of the pulse and heart as to diet in these cases.

Possibly you may be saying to yourselves "Surely that cannot all be true! What about uræmia?" Well, we all know we have not the faintest notion what the poison is that causes uræmia, and we do not know any class of food that influences it in any way whatever. There is no evidence that nitrogenous food increases the liability to uræmia, we do not know whether the poison is a nitrogenous poison.

ALBUMEN IN BRIGHT'S DISEASE.—Now I thought that the best way to finish our lecture was to tell you how to treat particular symptoms of Bright's disease. There are only three which I have time to mention, and they are much the most important, viz., the albumen, and the uræmia, and the state of the heart. It does not matter which order we take them in. Supposing we take albumen first. I find many students have got an erroneous impression about that. When they find albumen in the urine they immediately jump to the conclusion that the case is one of Bright's disease. Now, albumen in the urine may be of very little importance. You all know enough of medicine to know that the amount of albumen in the urine bears no relationship to the gravity of a case of chronic Bright's disease. People come in here with fatal cerebral hæmorrhage and uræmia, and with only a trace of albumen in their urine. Also at our public schools it is estimated that one-fifth or one-sixth, or even sometimes over that proportion of the youths there, at the age of 15 or 16, occasionally pass albumen. They have what is called albuminuria adolescens, but they are perfectly well. Perhaps you have never reflected that in a large hospital about half of the people passing albumen have not Bright's disease. Blood in the urine, pus in the urine, gonorrhœal discharge, heart disease, specific fevers, all mean that there is albumen in the urine, but the majority of patients who are admitted to an ordinary hospital, such as this, with albumen in their urine, have not got Bright's disease at all. These facts that I have laid before you show that some albuminuria is in itself really of very little importance. Its importance is as a means of diagnosis and prognosis, but it does no particular harm to lose a little albumen. For many years people said that milk was a good treatment for Bright's disease because it diminished the albumen in the urine. We will come back to that directly. Take the other reasons that they gave to show that milk was a good thing. They said it was easily digested and absorbed. That may be true for a time, but patients get to loathe it and then they cannot digest it with comfort. They said it did not irritate the kidneys. That may be true, but other plain diets do not irritate them much. They said it is a diuretic. But it is not much of a diuretic; and it is doubtful whether it is a good thing to whip the diseased kidney with diuretics. Then they said it diminished the albuminuria. I want to show you that it does not do so. My reason for doing that is because I think you should get it thoroughly into your head that a man with chronic Bright's does not, as a rule, need milk diet. I have shown you that the albumen itself does not matter very much, and now if I show you that milk does not influence the albumen, I think I shall show you that you should not keep these patients on milk.

We made a number of observations on several cases of Bright's disease admitted under me for two consecutive years. I will not take a minute to give you the results. Of eight people with chronic Bright's disease, Case 2 passed 8·6 grains a day of albumen when fed upon milk, as against 9 grains on chop and eggs; Case 3, 24·3 on milk, against 17 on nitrogenous food, and 23·8 on farinaceous food, and 25 on chicken and fish; in Case 6 there was no albumen on milk, farinaceous or fish diet; Case 7 showed that the albumen was most on the milk and diminished on the other diets. So that these cases alone are enough to show you that a milk diet itself has no appreciable effect in diminishing the albuminuria. And when you consider that a

hospital full diet contains about four hundred grains more proteid than hospital pure milk diet, you can see the additional amount of nourishment taken by the patient taking the full diet.

On another occasion we also contrasted farinaceous food with milk, and we found that there was less albumen passed when the patient was fed on farinaceous than on milk diet. Then we contrasted farinaceous food with full diet, and we found that much more albumen was passed on a farinaceous than on a full diet. Altogether, among all our cases, in only two was there any increase of albumen on a full diet, and one of these died so soon that he was very little value as a contrast. All the other figures pointed in the same direction—that the difference of diet in chronic interstitial nephritis did not effect the albumen in the way that if you give the patients milk, the albumen is less. So that we have shown that the albumen itself probably is not of any great consequence as regards harmfulness to the patients, and even if it were, the diet would not influence it. Therefore, I hope I have shown you that, as it was solely because of the belief that it diminished albumen that milk was given, there is no reason for supposing that an exclusively milk diet is a good thing for a patient with chronic interstitial nephritis, unless it be desirable on account of the heart.

Effect of Diet on Uræmia.—Then further about the full diet. I will read you all the report of eight cases summed up together:—"There is no doubt that the patients feel better and stronger on a full diet or a nitrogenous diet, such as chicken or fish, than on milk or a farinaceous diet." With regard to the fatal cases, we were able to say, "There is no evidence from these cases that a fatal result is brought about by full diet. Nor do these diets increase the uræmia." Case 5 was very striking in this respect, for although he had been taking farinaceous diet for four weeks, he developed severe uræmia. From the day that the symptoms abated he was put on a full diet and the uræmia never returned, and he left the hospital greatly relieved. Not only has a full diet no tendency to produce uræmia, but a person getting a full diet feels stronger for it. That is an experience which we can vouch for. So that, just before leaving the question of diet, to sum it up, I have told you about the albumen, I have told you that diet does not, as far as we know, influence the liability of uræmia. Therefore, your only guide must be the pulse. Let your patients have the ordinary diet, but omit the extractives such as you get in meat soups or beef-tea, if the pulse tension is high and the heart hypertrophied.

Treatment of Uræmia.—To leave the albumen and pass on to the uræmia. As we know of no antidote we had better discuss it in detail. The slightest symptom of uræmia is headache, and if you have to deal with that get the bowels to act at once, because headache shows that the kidneys are not getting rid of some poison. Give, therefore, a saline purgative. During the headache, if severe, these people are generally better when kept quiet in a dark room. Caffein seems to relieve their headache, so give them a cup of strong hot tea. I think everyone is agreed that of drugs to relieve the head, the best perhaps is nitro-glycerine. One minim of liquor trinitrini, five grains of caffein, and two and a half grains of soda salicylate to render the caffein soluble, in one ounce of water will prove beneficial. For the same reason as that for which you want to make the bowels act you want to make the skin act. Therefore tell the man to have a warm bath. If any of you came to me with a uræmic headache I should give you a hot bath, a good purgative, put you in a dark room, and give you a mixture such as I have named. But patients do not often come here for that; they come for some more severe uræmic condition—with restlessness, delirium, or coma. Suppose you diagnose it, what do you want to do then? You want to get the bowels to act very quickly. You want to give a purgative that an unconscious patient can swallow and that will act quickly. The two most powerful purgatives are croton oil and elaterin. Mix a drop of the oil with a little butter and put it on the back of the tongue, or put a couple of grains of the compound elaterin powder on the back of the tongue. In a short time the bowels will be well opened, and we shall have thus adopted what we believe to be a good means of getting rid of the uræmic poison.

You will in the next place want to make the patient sweat for the same reason. Most students give far too much pilocarpine, which not only makes him sweat, but increases his bronchial secretion. These chronic cases have often got some bronchitis or pulmonary œdema, and if you give the patient too much pilocarpine you may actually kill him by blocking up his lungs by secretion. One-sixth of a grain of nitrite of pilocarpine is enough to inject subcutaneously, then wrap the patient well up in hot blankets, and put hot water bottles to his feet so as to make him sweat all the more. The blanket will suck up the sweat and he will not get chilled. But, at the same time, to make him perspire all the more give him a cup of hot tea. If he is not quite so bad, give him a hot-air bath or a hot-water bath without the pilocarpine. Then you have got rid of as much of the poison as you can by the skin and by the bowels.

You can get rid of it in another way, by bleeding the man; by that means you take away some of the poison circulating in the blood. Therefore, if he has uræmic convulsions, it is a good thing to bleed the patient, because by bleeding him, not only will you remove some of the poison, but you will remove some of the blood from the right side of the heart where it has been dammed up owing to the respiratory spasm connected with the convulsion. If for any reason you cannot bleed him, you can wet-cup him, but that has nearly gone out of fashion.

Supposing the delirium is very troublesome and the restlessness very great or the convulsions are very troublesome, give him some chloroform. It is very surprising how easy it is to keep the convulsions under with a whiff or two of chloroform. I have been called more than once to see patients in severe uræmic convulsions, and by administering a little chloroform I have been able to keep them quiet.

Then you may sometimes give morphia to uræmic patients who are restless or convulsed, but you should only give that when all other methods of treatment have failed, because there is no doubt whatever, that occasionally you come across people whose diseased kidneys cannot excrete morphia, and they are killed by morphia poisoning. It is a well known fact that people with Bright's disease bear morphia badly. Still, if nothing else succeeds, if the convulsions seem likely to kill the man, you may give one-eighth of a grain of morphia subcutaneously. It is a serious remedy, but sometimes the case quite justifies it.

If the uræmia has taken the form of coma rather than convulsions, the treatment is just the same, except that you will never, of course, give chloroform or morphia.

Another form uræmia takes is vomiting. Do not treat that except it is very bad, and then give the patient some bismuth. It is probable that the uræmic poison is excreted, like some other poisons, such, for instance, as arsenic, by the stomach, and the patient vomits it and so gets rid of it.

It is not once in two or three years that I treat uræmic diarrhœa. It, like vomiting, ought to be looked upon as an attempt to get rid of the poison, and therefore harm is done by treating uræmic vomiting and uræmic diarrhœa.

Sometimes uræmia takes the form of insomnia. Well, then, there is nothing better than trional or sulphonal. Either is well given in a cachet. Do not give the compressed tabloids, because compressed tabloids may be so hard that probably not even an ostrich could digest them, and the tabloid is passed undigested. I have often found compressed tabloids in the fæces. Paraldehyde seems to act very well, but the objection is that it is most abominably nasty stuff.

Another symptom that uræmic people complain of is dyspnœa. I know nothing better for it than nitrites. If it is severe make them inhale nitrite of amyl; if still worse make them also take nitro-glycerine internally.

The last thing we have got to discuss is the state of the heart. If the pulse tension is very high, naturally the drug that gives most benefit is nitro-glycerine. I think it is a good thing for patients, with chronic Bright's disease, who have a hypertrophied and high-tension pulse, to take one chocolate tabella of nitro-glycerine twice a a day. It relieves the headache and the throbbing, and keeps the pulse tension down. Also

in the same way, I think that iodide of potassium, 10 grains three times a day, is useful. Of course, if the patient has a high pulse tension he should have the bowels well opened, and I should give him every morning a claret glassful of Æsculap water in a tumbler of warm water. That will ensure a watery motion, and the large amount of blood diverted to the abdomen will relieve the pulse tension. If the pulse tension is low, and he is suffering from cardiac failure, give him a little nux vomica and caffein. The dietetic directions for the cardiac condition we have already discussed.

I do not pretend that these few disjointed observations cover the whole subject, but I hope we have considered the chief symptoms.

Myxœdema.

A PROPOS of Dr. Hale White's lecture, you may perhaps think this note of a case that occurred in my practice some years ago of sufficient interest for the GAZETTE.

Patient was under thirty and had had several children, the last about six months previously. She presented, when I saw her, a typical case of myxœdema and recovered rapidly on thyroid. The history was that there had been severe hæmorrhage at the last confinement with repeated losses for some weeks. The patient was thus reduced to a condition of profound anæmia which condition gradually merged into the myxœdematous state in which I found her.

My impression was that the toxic condition of the blood arising from the anæmia was the cause of the cirrhosis of the thyroid: so that the myxœdema was, in this case, only part of a larger symptom group in which the anæmia resulting from hæmorrhage was the central feature.

The fact, mentioned by Dr. Hale White, that many subjects of myxœdema are multiparæ reminded me of this case. Possibly other general practitioners may be able to supplement the list. Although the pathology of myxœdema has been satisfactorily worked out, its preventive treatment will not be on a proper footing till its cause is better understood than an present.

S. N. MACILWAINE.

Pass List.

Second Conjoint Examination, July, 1901.

H. H Jenkins, F. B. Lowe, W. N. May, A. V. Maybury, P. F. Minett, C. S. Morris, M. J. Mottram, G. Nunn, E. C. Peers, G. H. Rees, G. C. F. Robinson, F. Rogerson, Richard P. Rowlands, R. St. G. Seagrove.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

Impressions.

DEAR SIR,—I can confirm and supplement Mr. Ormond's "Impressions," in the last number of the GAZETTE, from the other side of the globe. Perhaps little would be expected from South America; but as her medical men generally complete their studies in Paris—I say "complete" advisedly, for as far as I can learn, *they seldom read after going into practice—the result* may be compared with what obtains in Berlin and Vienna. First, as to students. A young friend of mine, beginning his curriculum, told me that he expected to be in practice in five years. He was born and bred in the country, and natives are seldom ploughed. Besides, he had an uncle in the profession who had great influence with the examiners! His study of anatomy begun thus: Having paid for a part, he "cut it off" and gave it to the dissecting-room servant "to clean." So he laid the foundation for his study of osteology. Meanwhile he was attending a few "orations," I think he called them, as weather and other circumstances permitted. As to anæsthetics, I believe mine was the only "gas-bag" in Buenos Ayres—a city of close on a million inhabitants—and, as far as I could hear, the only one in South America. A leading dentist assured me that he considered nitrous oxide a most dangerous anæsthetic. He had even known one death from it, which occurred three months after the administration; and I believe he was honestly ignorant of the nonsense he was talking. Outside the British Hospital, I never heard of an anæsthetic being decently given, and have seen some terribly dangerous attempts at it. To see a patient put under chloroform—the only anæsthetic they pretend to understand—without a struggle, and without scattering the bystanders when the operation began, caused the natives grave concern. They opined the patient must be too deeply under, and made anxious enquiries as to the pulse. That the anæsthetist should pay little attention to the pulse—though unknown to them, he might be conscious of the temporal or facial—was little short of barbarous. Midwifery among the natives, as I believe among most foreigners, is practically confined to midwives, and woe betide the unfortunate obstetrician called in by the native midwife, for the case is certain to be moribund! The most successful midwife to-day among the English population left the British Hospital to begin her "profession" on the strength of a testimonial from me. To write it I had to call in the assistance of a native gentleman. The result, in the picturesque and dignified language of the Dons, was like a "noun of multitude," for it signified many but not much. She had never seen a labour! On one occasion, called to relieve a man of a bladder full of

blood from a stone in the right kidney, I found that a native colleague had been before me, armed with a catheter which he had bought at a chemist's *en route*. Failing to pass the instrument he had prescribed "Patience," and gone away. *Paciencia* and *manana* (to-morrow) are the words most often used in the Spanish dictionary. Summoned hurriedly to see a man "in a fit," I arrived to find a native practitioner holding on to the tongue of a corpse with a pair of carpenter's pincers. A hypordermic syringe lay beside the bed, and the gentleman said he had used it to give "a little strychnine." The terrified relations described three clonic convulsions with short, but absolutely lucid, intervals, and opisthotonos. The police and the practitioner arranged a certificate of death from carbolic acid poisoning. On what grounds I cannot imagine. Fortunately for me I was not invited to hazard a diagnosis. Yet our profession is deeply esteemed in South America. Do not the people "dearly love a Lord?" And is not "Doctor" the only title possible in a Republic? "The Doctor" always takes the hostess in to dinner, unless there be present an older doctor, either of medicine, law, or Divinity.

F. WYATT-SMITH.

Army Dental Surgeons.

DEAR SIR,—I was rather surprised to find no comment in the last issue of the GAZETTE on the recent appointments of two Guy's men as Army Dental Surgeons. Mr. Kenneth Clark and Mr. Ernest W. Corfe, sailed for the Cape on the transport *Bavarian*, upon June 17th, under circumstances worthy of record, for their departure marks an era on the part of the Government, in its attempt to deal with the dental requirements of the army. Early in 1900, when the Imperial Yeomanry Hospital left these shores, Mr. Fripp obtained permission from the authorities to include one dental surgeon in his staff, and a year later, strong representation to the Government has led to the appointment of four dental surgeons for service with the troops in South Africa. They are to sign for a year, and to be placed on the same level professionally as the army surgeon. The pay is £1 a day, with captain's field allowance, a servant, a horse, and a gratuity at the end of the term. The authorities provide operating chairs and certain appliances. In principle these appointments are good, but I am afraid that Messrs. Clark and Corfe will find themselves overwhelmed with work; in fact, it is improbable that they will be able to attend to a small percentage of the officers who require their care, entirely apart from the needs of the soldiers. When one takes into consideration that the whole dental department of this hospital, where there are fifty operating chairs, and more than one hundred dressers, only completes about one hundred new cases per week apart from extractions, it will be difficult to understand how four young dentists are to treat the worst cases chosen from two hundred thousand patients. If the authorities would send out forty more dental surgeons as I recommend in the *Lancet*, something useful might be done, and little as I love the sandy wastes of South Africa, I would repeat my offer to return to that land in order to organise a more efficient dental service for the soldiers.—I am, yours faithfully,

July 4th, 1901. F. NEWLAND-PEDLEY.

Recent Additions to the Dental Museum.

1. Two extremely flattened teeth, taken from a mouth in which all the others were similarly misshapen. Presented by Mr. Biss.

2. Model of a mandible showing a molariform second left premolar. Mr. S. E. Bowle.

3. Model of a mandible with five premolars on the left side. (This is a duplicate of one to be seen in the Dental Museum, Manchester.) Mr. Headridge.

4. Model of a mandible having three premolars on each side.

5. An upper canine tooth measuring 1¾ inches and showing indications of exostosis and absorption at several points on the root.

6. Plaster models of maxilla and mandible. The maxilla shows a fracture of the alveolus with the loss of both centrals and the left lateral incisor. In the mandible the alveolus was also fractured, the lesion extending from the left central incisor to the first left premolar. The injury was caused by the kick of a horse. Mr. Payne.

7. A carious tooth, the cavity of which contained a polypus of the gum. The specimen shows a process of the pulp cavity extending close to the masticating surface of the tooth. Mr. H. J. Webb.

8. Four models with the apparatus used in the treatment of a case of superior protrusion, where the lower incisors impinged against the gum behind the upper incisor tooth. Mr. W. A. Maggs.

J. LEWIN PAYNE, Curator.

Papers by Guy's Men.

Are not some Patients said to be afflicted with Gastric Ulcer really suffering from a different disease? By W. Hale White, M.D., F.R.C.P. Lond.—*The Lancet*, 22nd June.

Foreign Body in the Bronchus: Tracheotomy, Recovery. By F. B. Judge Baldwin, M.R.C.S. Eng.—*Ibid*,

A case of Nephro-lithotomy in which the diagnosis of Renal Calculus was confirmed by the X-rays. By Oswald J. Currie, M.B. Lond., M.R.C.S. Eng.—*Ibid.*

Aneurysm of the Subclavian and Axillary Arteries; Ligature of the second part of the Subclavian. By G. A. Wright, M.B. Oxon., F.R.C.S. Eng., and P. R. Wrigley, M.R.C.S., L.R.C.P. Lond.—*Ibid*, 22nd June.

Passim.

The election of Mr. Howse to be President of the Royal College of Surgeons has been received with the greatest enthusiasm by one and all at Guy's, as a splendid honour conferred upon one who is more than worthy of it. In another column will be found a just appreciation of Mr. Howse as a man and a surgeon, from the pen of one who speaks with authority.

On Friday last, every Guy's man who could shirk his work, or put it on another's shoulders, had hurried away from the heat of the hospital down to the fresher attractions of the ground, where Guy's were playing Bart.'s, otherwise the cheer which greeted Mr. Howse's appearance would have been more representative, though it could not have been heartier.

Another Surgeon on our Senior Staff has to be sincerely congratulated. We refer to the election of Mr. Clement Lucas to the Council of the Royal College of Surgeons. It is indeed pleasing to see the good work Mr. Lucas has done in the interest of surgery, more especially renal surgery, appreciated in this manner.

The Prize-giving, which took place on Wednesday, July 10th, was favoured with the two essentials of a successful garden party—brilliant weather and a larger muster of friends and visitors, even than we are wont to see. Purists might possibly find fault with the use of the term garden party to describe a gathering of guests in our tiny sparrow-haunted "park." But our "park" (as we still love to call it) had undergone its annual transformation, changing rapidly from the work-a-day appearance familiar to all, into a scene of animated brilliance.

There are many reasons why these Prize Days are justly popular. Old Guy's men can meet and compare notes on the year's vicissitudes, or talk over cases of particular interest, and on the other hand, visitors get the opportunity of seeing the wards of the hospital as they aren't. Judging by a glimpse of Patience, the hospital is a veritable flower garden, a thing of joyous colours and æsthetic delight. But it would be quite a moot point, if the neat though unadorned wards of everyday life were not quite as pleasing to the eye as the wards tastefully decorated in their "best," as they are on gala days. And *(joco remoto)* the balconies, an addition during last year, are deserving of all the admiration lavished upon them, not on account of the flowers they contain, but for the excellent chance they give convalescents of enjoying the fresh air or a smoke.

Another pleasing amusement at Prize Day is the identification of gowns. We do not refer to the choice and elaborate confections of Worth or Robinson, but to the gaudy raiments of the male sex. All the ordinary varieties were represented and recognised with more or less accuracy, but one or two of the rarer species were serious pitfalls. Of the headgear, there could be little discussion, although it was generally conceded that in some cases they would be warm and pleasant in winter. The procession to the Physiological Theatre was not quite as imposing as of late, owing to the shortness of the tail. And when a tape was drawn across the cinder tract leading to the new buildings, the general effect was ludicrously like a walking match, with Prestige an easy winner.

We wish to draw attention to Mr. Newland-Pedley's letter on the care of the teeth of our soldiers serving in South Africa. It is a matter of common knowledge that there is a great need of skilled care of the teeth of our troops, tried as they are by the ration biscuit. As so many would-be recruits are discarded for deficient teeth, it is somewhat illogical that up to the present time there has been no attempt on the part of the military authorities to preserve the teeth of the soldier after he has enlisted. No comment is needed upon the small number of men (four only) who have been despatched to look after such a large army.

Nursing News this week tells of many changes; it is with the deepest regret that we read of the departure from Guy's of so many

general favourites. We can only join the Matron in wishing them all the best of good luck in their new work.

THE British Congress on Tuberculosis is to be opened on Monday, July 22nd. The programme of work that has been marked out shows that no ground is to be left unturned, in the endeavour to discover the means by which the spread of tuberculosis may be prevented, or at least greatly checked.

THE news of Mr. Groves' resignation of the lectureship in Chemistry, which he has so worthily filled, will be received with much regret by all those who have come into contact with him. The great care he bestowed on his lectures, and his ready help when in the laboratory, are well known to all those who have worked under him.

THE appointment of Mr. Wade to the vacant post, however, somewhat consoles us. For years past Mr. Wade has earned the gratitude of all the men working in the laboratories, particularly those going up for the examinations of the London University, by his unfailing patience in smoothing the thorny way of Chemistry for the beginner, and his appointment to the lectureship will be hailed with delight by all men.

ALTHOUGH it is impossible in this issue to publish an official list of men who have been successful in the recent conjoint examination, we understand that Guy's men have been doing well, especially in surgery. We are convinced that this satisfactory result is, to a great extent, due to Mr. Jacobson's classes in clinical surgery.

MEN find in these classes just what they want to prepare them to meet what is, to many, the hardest part of the examination. While taking a broader view of their use, they acquire in them practical facts of sterling value, which will serve them for all time. Considering the time and pains Mr. Jacobson has been willing to give, it seems a great pity that he should be subjected to any unnecessary annoyance caused by want of accommodation. The theatre is so constantly required for operations, that it hardly seems the most suitable place to choose for such demonstrations, but surely it ought to be possible to find a room where there would be no chance of his having to abruptly break off in the middle of his teaching.

WHILE commenting in our last issue on the personnel of the committee which is to advise His Majesty's Government as to the best way of reorganising the Army Medical Corps, we suggested Mr. F. E. Fremantle as one of the younger men of the profession, who might with advantage be made use of by the committee. We feel that we must have all unconsciously donned the mantle of the prophet for the time, as we notice that our old editor has since been appointed as one of the secretaries to the committee. We congratulate him on his appointment, and trust that the labours of the Commission may be fruitful, and that it may succeed in abolishing the disabilities by which the service has hitherto been handicapped.

THE United Hospital Sports were held at the L.A.C. ground at Stamford Bridge, on Wednesday last, in perfect weather. After a very keen struggle between the two hospitals, Bart.'s eventually gained the victory over Guy's by 56 points against 49. A full account will appear in our next issue.

IN his speech on Prize Day the Treasurer spoke of those trophies which should always find a place on the walls of our smoking-room. The Cricket Club were not slow to fulfil his desire in respect of one of the most coveted of these, for by the signal victory which they gained over Bart.'s last Friday, they restored the Cricket Cup to its old case.

THURSDAY'S play practically settled the match, for, after St. Bartholomew's, taking first knock, had compiled a useful total of 259, our men responded in the most satisfactory style. Barber began with one or two rather fluky strokes, but, soon settling down to his work, he played with rare confidence, and when stumps were drawn

had placed 168 to his credit with his wicket still intact. Facing tired bowlers, Wyatt, Langdale and Poyser ably assisted him, and runs came very freely, although our opponents' fielding never became loose, and at times elicited applause from the supporters of both sides. On Friday, Guy's completed their innings, scoring in all 475 runs, to which Graham-Smith, Morres and Wetherell made useful contributions. With their second innings came the *débacle* of St. Bartholomew's, for Poyser seemed irresistible, and his average of seven wickets for 18 runs was a very fine piece of work.

THERE was a fairly large and a most appreciative assembly present at Honor Oak Park, including many ladies and members of the Staff, notably Mr. Brailey, the popular President of the Cricket Club.

THE United Hospitals Shooting Cup was competed for at Bisley on July 11th, when St. Thomas's were successful, beating Guy's, who were third, by twelve points. Our shooting was not of the best, particularly towards the end, when the light failed. All teams, however, suffered from the same disadvantage.

AT water-polo, Guy's met a better and a faster team in St. Bart.'s, and were defeated by four goals to one. As we have practically a new team, we must hope for better things next season.

Novelties.

"ORION" SOUTH AUSTRALIAN WINES.

Samples of the "Orion" brand of South Australian wines have been submitted to us for comment, and while we cannot claim to be experts in this department, we have no hesitation in testifying to their apparent excellence. Nor is expert evidence wanting, for all these wines are certified as being pure and sound by the analysts appointed by the South Australian Government. The wines are "clean," and very pleasant to the palate, being remarkably free from volatile acids and objectionable preservatives. They should prove invaluable for invigorant and tonic purposes in the sick room, while their moderate cost places them within the reach of those with limited means, who will doubtless appreciate a good wine of British manufacture.

Prize Day, 1901.

THE RIGHT HON. LORD JAMES OF HEREFORD, in the presence of a large and distinguished company, comprising many well-known supporters and friends of the hospital, performed the pleasing duty, this year, of distributing the medals and prizes to the successful students. Amongst those present were the following:—H. Cosmo O. Bonsor, Esq., (Treasurer of the Hospital) and Mrs. Cosmo Bonsor, Miss James, the Bishop of Southwark and Lady Barbara Yeatman Biggs, the Countess of Bective, the Mayor of Southwark, Alderman and Mrs. Smallman, Mr. Sheriff Lawrence, Mr. Under-Sheriff Gardiner, the Rev. Canon Taylor, the Hon. Sir Charles Fremantle, K.C.B., Sir John and Lady Wolfe Barry, Sir Joseph and Lady Savory, Sir Thomas Smith, Bart., Sir Joseph Fayrer, Bart., Prof. W. A. S. Hewins, the Clerk of the Salters' Company, the Mayor of Bermondsey, Sir Samuel Wilks, Bart., A. C. Morton, Esq., Arthur Reynolds, Esq., T. Pickering Pick, Esq., F.R.C.S., W. H. Allchin, Esq., M.D., James C. Marshall, Esq., Surg.-General W. Beatson, R. K. Causton, Esq., M.P., Alfred Beit, Esq., and the Medical and Surgical Staff of the Hospital and Medical School.

Precisely at half-past three o'clock, Lord James of Hereford, accompanied by the Governors and Members of the Staff, proceeded from the Court Room to the new Theatre in the Medical School, where the students and their friends had assembled.

MR. COSMO BONSOR, having taken the chair, introduced Lord James of Hereford, who had been kind enough to come down to honour Guy's Hospital, and to give away the prizes to the successful students for the past year.

Dr. L. E. Shaw (Dean of the Medical School), then presented his Report, which taken as read, was as follows:—

The Dean of the Medical School is pleased to be able to report to the Governors and others interested in the welfare of the School, that the past academical year has been a period of steady work and satisfactory progress.

The entry of new students in all departments has been maintained, and the School is well able to supply the demands of the Hospital for the service of dressers and qualified medical officers to carry on the ever-increasing work of the charity.

The event of the academical year, likely to be of the greatest importance to the School, has been the initiation of the work of the University of London, as a teaching, as well as an examining body. Guy's Hospital is a constituent college of the reorganised University and the members of the Staff are taking their due share in bringing about the changes necessary to enable the University to take its proper position as the centre of higher education in the metropolis. The interest which Guy's is likely to take in this work is indicated by the large number of our students who last year were successful at the examinations for the medical degrees of the University. In all more than sixty of our students

passed London University examinations, senior to the Matriculation, and the following honours were obtained:—Mr. R. P. Rowlands obtained the Gold Medal in *Anatomy*, and 1st Class Honours in *Materia Medica*; Mr. P. R. Bolus obtained the Gold Medal in *Physiology*, and 1st Class Honours in *Organic Chemistry*; Mr. E. H. B. Milsom obtained Honours in two subjects, and Messrs. Goldie, N. I. Spriggs and H. S. Brown each obtained Honours in one subject of the Intermediate M.B. Examination. At the Preliminary Scientific Examination Mr. R. W. Allen and F. M. Longson obtained honours. At other public examinations our students have obtained a measure of success which cannot fail to be gratifying to their teachers. In the Dental Department of the Hospital, which continues to do an important work in relieving suffering as well as in training a large body of men to follow the profession of Dental Surgeons, our Students have fully maintained the traditions of the School. During the past year sixty-four men competed for the L.D.S. Diploma of the Royal College of Surgeons, and of these fifty-two were successful. The building operations in connection with the Henriette Raphael Nurses' Home have made it possible to effect important structural alterations in the Dental School, which will increase the accommodation, and improve the lighting and ventilation of the Conservation Room and Dental Laboratory.

Guy's Hospital Medical School, as well as the cause of medical education in general, must be warmly congratulated upon the munificence displayed by one of our Governors. Mr. Robert Gordon has presented a sum of over £6,000 to the Hospital with a request that the interest should be used for the benefit of medical education and research. The Governors, on the advice of the Medical Staff, have decided to endow a Lectureship in Pathology, the holder of which shall be required not only to teach, but also to conduct and carry on in our laboratories, researches into the causes and treatment of disease. The number of endowed lectureships in connection with medical schools in London is exceedingly small, and it is confidently hoped that Mr. Robert Gordon's example may be the means of inducing others to remove this reproach. It is gratifying to the Medical School that it has been found possible to worthily fill the post of Gordon Lecturer from amongst its former students. Dr. Herbert Durham, upon the completion of the investigations he has been conducting in America on the subject of Yellow Fever, will take up his duties in connection with this lectureship at the commencement of the next Winter Session.

The School has, with much regret, received Mr. Groves' resignation of his lectureship in Chemistry and Metallurgy after nearly twenty years' service. Mr. Wade has been promoted to the position thus vacated. Dr. Willey has resigned the lectureship in Biology in order to undertake some important investigations in British Guiana. His successor has not yet been appointed. A Biennial Travelling Scholarship has lately been established in the Dental School. Mr. Frank Pearce, the first Travelling Scholar, has, upon his return from his period of study in Pennsylvania University, been appointed a Demonstrator of Practical Dentistry. Dr. Fawcett has been appointed Dean of the Medical School from the end of the present Session.

The recent report of the Clubs' Union Council indicates great activity in the Social, Athletic, and Literary Societies in connection with the School. Sir Frederick Wills, who, as a Governor of the Hospital, has long shown a keen interest in all matters connected with our students, has been elected President of the Union for the ensuing year.

The greater number of the survivors of the Guy's men who volunteered for duty in South Africa have now returned to England. Our losses have been heavy. Steps are being taken to provide within the Hospital a fitting memorial to those who have lost their lives in the service of their country.

LAURISTON E. SHAW, *Dean.*

The Dean then read out the list of medallists and prizemen, and each recipient, on being handed his reward by Lord Hereford, was heartily applauded by the spectators.

Open Scholarships in Arts.—Herbert Orpe Brookhouse, Blackheath School, £100. William Henry Dencer, Colfe Grammar School, £50. George Cockcroft, Rossall School, certificate. Thomas Bramley Layton, Bradfield College, Berks, certificate.

Open Scholarship in Science.—Richard William Allen, Guy's Hospital, £150. Frederick Harold Lennox-Jones, certificate.

Scholarship for University Students.—Arthur Robertson Brailey, Downing College, Cambridge, £25.

Junior Proficiency Prizes.—John Hunter Clatworthy, £20. Henry Francis Bell Walker, £15. Gerald Russell, £10. Harry Hunter Carter, certificate.

The Michael Harris Prize for Anatomy.—John Hunter Clatworthy, £10.

Sands Cox Scholarship in Physiology.—Henry Francis Bell Walker, £15. John Hunter Clatworthy, certificate. Gerald Russell, certificate.

The Hilton Prize for Dissections (1900).—Frederick Rogerson, £3. Neville Ivens Spriggs, £2.

The Arthur Durham Prizes for Dissection.—First year's students.—Arthur Douglas Crofts, £5. Arthur Boniface O'Brien, certificate. Frank Markland Longson, certificate. Howard Vincent Mitchell, certificate. Senior Students.—Edward Crosby Peers, £15. John Edmund Spiller, certificate. John Alan Campbell Greene, certificate.

Dental Travelling Scholarship (1900).—Frank James Pearce, £100.

Dental Prizes.—First year's students.—Herbert Theodore Binns, £10. Wilfrid Courtney Lyne, certificate. Second year's students (1900).—Ernest William Corfe, £15. Harry Lambton Dent, certificate. William Edward Meads, certificate. Second year's students (1901).—Hubert Clarence Visick, £15. James Bertrand Barron and Arthur Hastings Bell, equal certificates.

PRACTICAL DENTISTRY PRIZE.—Herbert Theodore Binns and Wilfred Ernest Griffin, equal £5 each. Edgar Everitt Lacey, certificate.

THE TREASURER'S GOLD MEDAL FOR CLINICAL SURGERY.—Ecroyde Ihler Claxton.

THE BEANEY PRIZE IN PATHOLOGY (1900).—James Alfred Butler, £34.

THE GOLDING-BIRD GOLD MEDAL AND SCHOLARSHIP IN SANITARY SCIENCE.—Sidney Thomas Reid, £20.

The Right Hon. LORD JAMES OF HEREFORD: Mr. Cosmo Bonsor, you were good enough to say, in strange language to me, that I have conferred somewhat of an honour upon Guy's Hospital by my presence here to-day. Allow me, on the other hand, to assure you that I feel it a great and distinguished honour to be enabled to accept the invitation that you were good enough to give to me to be present here amongst this assembly this afternoon. (Applause). I did, however, feel it somewhat strange that you should have thought fit to select me to address anyone here present who is going through the career of a student. I look back upon my old scholastic days perhaps with some pleasure, but with also some regret that the honours which I gained were so very barren. I recollect that my only success was one compliment of a somewhat dubious character, for when leaving my old school, my old master sent for me and wished to say good-bye, and he remarked, "I am sorry you are going, for the eleven will miss you very much"—(laughter)—"but I must at the same time say, that I am fully convinced that there has never been any boy in this school who effected so much mischief and afforded such slight opportunity for detection as you." (Renewed laughter). Well, looking back upon that want of scholastic honours that I gained, I never knew the consolation of it till I heard a distinguished American, James Russell Lowell, address a number of students in the Middle Temple. He said to them, "I myself should have been a great lawyer except for one circumstance, and that was, that when I attempted to enter a legal university, differences of opinion arose between me and my examiners, and I never crossed the threshold more." (Laughter). Ladies and Gentlemen, that experience of Mr. Russell Lowell's has consoled me somewhat in the past, and perhaps it may afford some little consolation to the unsuccessful students of Guy's Hospital. But to put on a little more serious tone, let me say with what sympathy I address those who are students in this great institution. I can recall easily enough the days when I stood, as they now stand, upon the threshold of my career. I can recall the hope that I had for my profession, and also that indispensable quality of success, the liking which I had for it, and surely I may, in the spirit of that recollection, for a few minutes appeal to those of you who are about to enter upon the medical profession. Let me ask you to consider what that life is to be. There are professions, I know, in which greater emoluments may be gained, professions in which honour may be won upon a more direct course than can be gained in the medical profession. But there is one great advantage in that calling—that it affords to men, who are full of purpose and intent, a greater opportunity of doing good than any other profession existing in the universe. (Applause). I am not speaking now in any narrow sense of doing good, of the saving of life by scientific knowledge, or by relieving pain and suffering in the exercise of your professional calling. I am speaking of a greater and broader good which can be conferred upon humanity as a whole. May I explain to you what I mean. During the past two generations there has been a great progress in this country, a great progress effected throughout the land in regard to every section of the people. Just recall for a moment what the state of the people was two generations ago, that is at the commencement of the reign of our great Queen Victoria. Discontent prevailed in every class, there was suffering, and disloyalty, and incendiary fires. Our jails were full of criminals, and poverty, almost want, existed in the poorer classes of the community. But what a change has come over the land since then! Our jails are emptying, whilst our schools are crowded, we have a people contented and happy, proud of their loyalty, and rejoicing in the victories of their country. This contentment has been brought about by a particular mode of action, and I will tell you what it is. That change has resulted from the filling of a great want that formerly existed, I mean the want of sympathy between class and class, and as that sympathy has grown up and broadened, it has produced the great result that we see to-day. You have a people who, as I said, are contented because they know that they are cared for; they know there is a sympathy felt for them from class to class, which will ever assist and aid them. You find it so, not only in the education of the people, but in that care for them which brings them under better conditions of life, which in town and hamlet brings recreation and amusement for the poorer classes, and brings light to their homes. This great result has been brought about by the sympathy which so happily has been shown throughout the land. Now who, I ask, can play so great a part in the exercise of this sympathy as a man in the medical profession? In my view he has an advantage over every other profession that I know of. A clergyman may exercise the most sacred duty of his calling, but he oftentimes has to deal with various critics. As for a lawyer, I have never known him welcomed into any household for any particular good. (Laughter.) But surely the medical man must be, even at the saddest moment of trouble, a welcome visitor. If he comes to save a cherished life, if he succeeds in relieving from, or mitigating, pain, surely that of itself is enough to commend him. But that is only half his duty. A physician fulfils only half his vocation if he seeks merely to save life. He knows full well how most diseases, if not occasioned, are at least increased by the wounded spirit and by the mental existence of the patient, and therefore, as he stands by the bedside, he has other diseases to cure as real as those which proceed from fever or from

lesion. And it is not only to the patient that he can bring assistance, but to those also who stand round the bed he can bring consolation and comfort and aid and guidance. Hence it is that the man who follows the medical profession and performs his duty fully finds the greatest part of citizenship, and it is in this eventually that he will win the greatest honour. (Applause.) Every man, whatever position he occupies, is blessed in proportion as he bears the high responsibility of citizenship. I am not thinking so much at this moment of the man who may remain in a certain part of London, and is smiled upon by fortune, and has attained to great success. I am thinking of the man whose lot is cast in some sparsely-populated district, who is hard at work day and night, and has to encounter much weary exertion and receive small requital; and I ask him to think how, even in such circumstances, how great is the task that he may fulfil, by living for the poorest of his fellow creatures and making them to form a portion of a happy and contented people. I can say but little more to those gentlemen here to-day who are now commencing their career as students. I would ask them to bear in mind how great is the increased opportunity afforded to them of learning their profession; what enhanced opportunity, for instance, that great institution the London University affords—an opportunity which those who preceded them never enjoyed—in the gaining of that knowledge which they require in practising their profession. And I ask them to believe what, I think, is the experience of any man of advanced learning—that there is no time of life when knowledge is so easily acquired as in the time of youth. The mind of a man as he lives may strengthen in its reasoning powers, it may become stronger and more powerful as he grows older, but it is never so receptive as it is when he is in the position of a young man. The man of twenty will learn much more easily than the man of forty. There has been progress so great in many directions that students may be tempted to think it is almost useless to learn things to-day, because in a short time they will know so much more, and the knowledge already acquired will be of comparatively little use. We see an increase of knowledge destructive almost for many purposes, and certainly for national finance. The armed cruiser of two years ago will be out of date in two years more, and therefore it may be said "We are foolish to go on expending money when there is such a rapid improvement." Such a view as that may come to students when they recollect what surgical knowledge and medical knowledge was two or three generations ago compared with what it is now, and when they conjecture that those who succeed them will know so much more than they themselves know at the present time. Well, I recall what I think, in this connection, will give good comfort to those who have this view before them.

"As we surpass our fathers' skill
Our sons will shame our own;
A thousand things are hidden still
And not a hundred known.

"Meanwhile, my brothers, work and wield
The forces of to-day,
And plough the present as a field,
And garner all you may."

That is advice which I think must be followed. We can deal only with the present. Whatever the past may be in its darkness, or the future in its probable light, it is only in the present that work can be done. It now only remains for me, after these few brief words, to fulfil the task which has been allotted to me, and that is, in the name of every gentleman and lady present, to offer to those students who have been successful and those students who have been unsuccessful our very best wishes for their prosperity, our expression of hope that they will appreciate to the fullest the honour of their great profession, and that they will go forth trying to do their duty, not only as skilful practitioners, but as high-minded, loyal citizens of England. (Applause.)

Mr. COSMO BONSOR: Ladies and gentlemen, it falls to my lot, as on previous occasions, to move a cordial vote of thanks to Lord James of Hereford for his kindness in coming here to day, and for the eloquent address to which we have just listened. It becomes a sort of precedent that the Treasurer of Guy's Hospital, in moving this annual vote of thanks to the distinguished gentleman who is good enough to be our guest, should occupy the time of the audience with a short review of what has occurred in connection with the institution during the past year, but on this hot July afternoon I can assure you that I will make my remarks as brief as possible. In the first instance, I ought to mention that it is with the very greatest regret that the School is going to part with Dr. Shaw as our dean. Dr. Shaw for nine years has occupied that position, and all of us who have watched the affairs of the School know well what it owes to him. (Applause.) But while Dr. Shaw ceases to be dean, we are happy to have found in his successor, Dr. Fawcett, a gentleman who will carry on the traditions of this school, will look after its discipline, and will see that its great name and traditions are kept secure. (Applause.) To come to my next topic, I was rather amused, when we came into this room, to hear Lord James state that the comparative absence of students might be owing to the fact that there was a match at Lord's of an instructive nature. (Laughter.) Our Clubs' Union has recently gained a new president in Sir Frederick Wills, and there is nobody more acquainted than Lord James with the fact of the necessity of cricket and outdoor sports for the training of the mind. When I was asked by Guy's School to invite Lord James to be here to-day, one gentleman remarked, "Well, if you ask him to come during the first fortnight in July, please remember to mention that three days of the time are occupied with the Oxford and Cambridge cricket match." I assured them that they had no need to fear, for Lord James was not only a well known cricketer in his early youth, but had filled the proud position of president of the Marylebone Club, and was always present on those occasions when there was something to learn in the

cricket field. To Sir Frederick Wills I anticipate that we may look for a great stimulation in certain branches of our athletic sports. There are some prizes which should always grace the library of Guy's College, absent at the present moment. One hopes and trusts that that will not be for long. Now, let me say a few words with reference to the work of Guy's Hospital and Guy's School outside these walls. It is sometimes forgotten, I think, that Guy's men are to be found in every quarter of the world, and it is, I assure you, the greatest possible gratification to those who have been and are responsible for the working of the School, and also to the Treasurer, to have frequent correspondence from all parts of the world from Guy's men, asking questions, and always showing the keenest interest in the progress and condition of the School and Hospital. Recently our thoughts have naturally gone to South Africa. We have welcomed back, only this last week, Dr. Washbourn, one of our physicians. (Applause). A little time ago we were welcoming Mr. Fripp. (Applause). And let me here put in parenthesis that these two gentlemen and other Guy's men and women trained in the wards of Guy's Hospital were, more or less, solely responsible for the management of the Yeomanry Hospital at Deelfontein, and that, notwithstanding all the recent criticism of the hospital system in South Africa, not a single word of criticism was made at any time against that particular hospital, showing that the training obtained at Guy's produces not only the capacity for sound medical and surgical work, but also the capacity for a sound administration of hospital affairs. When we think of South Africa we naturally feel for those whom we have lost there. Poor Fitz-Hugh and many others trained here will never return. It has already been decided that a memorial, somewhere in their old hospital, should recall their names and put on record their services to their country. So soon as the war is over that, no doubt, will be carried into effect. We also remember many ladies who have gone out to South Africa. Some have returned in excellent health, and others are still on duty. Misses Davidson, Fisher, Tippetts, Loveday, Powell, Tillott and Rowell. They, and many others, remind us of the work that this hospital does abroad. One word as regards what it is doing at home. I mentioned just now the subject of hospital administration in South Africa. I think all of us have taken it as a very great compliment that two gentlemen so closely connected with Guy's as Dr. Perry (who is away to-day examining at the London University) and Mr. Fripp have been selected to serve on the committee which is to advise His Majesty's Government as to the best way of reorganising the Army Medical Corps. (Applause.) I think I am also right in saying that one of the secretaries of that committee, Mr. Fremantle, who was trained in Guy's, was one of the first civil surgeons who proceeded to South Africa and that his service there was long and arduous. But the every-day work at home is as interesting and as pleasant to watch as the work abroad. I should like to read you a letter that we received only lately from Lord Portman, who has kindly allowed me to use his name, and his letter, which shows what I mean by the work that is continually going on. He writes—

> "DEAR SIR,—Having just passed through a very severe illness, my recovery from which I owe, under Providence, to Dr. Goodhart and the Messrs. Daniell, of Blandford, all brought up at Guy's, and to the care of three nurses trained at Guy's, I enclose a cheque for £1,000 as a thank-offering, to be applied to the Sustentation Fund or the Re-endowment Fund—at the discretion of the Governors—also an annual subscription of ten guineas.—Yours faithfully,
>
> "PORTMAN."

Ladies and gentlemen, that brings me to the very few words that I wish to say in conclusion, as regards the needs of Guy's Hospital. To maintain this hospital in completeness and efficiency an ordinary expenditure of at least £60,000 per annum is necessary, and for £25,000 per annum of this we can only look to voluntary support to supply. At the present time the voluntary support accorded us falls far below this amount, while in addition the Governors have to face an expenditure of £180,000 on works which the age of the hospital has rendered indispensable. What these works were and how far they have been accomplished visitors to-day have the opportunity of observing. The treasurer of an institution must naturally be a beggar. On these occasions we do not beg for money, although a public appeal to meet the expenditure I have referred to is being promulgated. What we do beg for now is that sympathy which brings money, and for that intelligent understanding of what we are doing which will eventually bring the whole public to realise how great and far-reaching in effect is the work of a general hospital—work which comprises not only the curing of the sick, and assisting of the weak brought to our gates, but also the training of members of a noble profession for the future exercise of the highest functions of citizenship. I ask you to pass a cordial vote of thanks to Lord James, and before I put it to you I will ask Dr. Taylor, our senior physician, to second it. (Applause.)

Dr. FREDERICK TAYLOR: Ladies and gentlemen, I rise with great pleasure to second the vote of thanks to Lord James for his presence here on this occasion, and for the way in which he has addressed the students at this Hospital in connection with the presentation of prizes. I think we all ought to be thankful for his Lordship's attendance amongst us, for the kind words that he has spoken, and for the encouragement that he has offered. The medical profession is one which, like others, has its advantages and disadvantages. I think perhaps that, though a member of this profession, I need not enter into a very long discussion with regard to these. But there are some points connected with the medical profession which are of great importance. In addition to the feeling of how much good we do, which is before us always, and should be, there are other satisfactions in the profession that one does not lose sight of. There is,

for instance, the satisfactory feeling which so many people enjoy, the feeling of conflict. Lord James at the very introduction of his remarks related his experience of the satisfaction of that feeling. His was a conflict against authority; ours is a conflict against disease. This latter conflict is one which we shall always be engaged in as long as the world lasts, and perhaps it is best that this should be the case; for if the conflict were not going on, we should feel that our occupation was gone, and that we had nothing to exist for. This conflict is not one in which kharki, or carbine, or mounted infantry have much to do; it is a conflict in which science, observation, experiment, invention, and discovery have to be engaged. Those students here to-day must include amongst them, I feel sure, some who will be leaders in this conflict in the future, and when in the time to come they look back over the past, they will realise that they have been encouraged, helped and stimulated by this address which Lord James has given to us this day. I second most heartily the vote of thanks to Lord James. (Applause).

The vote of thanks was carried by acclamation.

LORD JAMES: Ladies and gentlemen, I do not know that I need to say anything in reply to your kind vote of thanks, which I feel I scarcely deserve. In what I have already said, I ran somewhat close to the line that separates some political considerations from those that refer to later scientific study, but I must confess to being somewhat of a politician, and it is difficult to avoid characteristics belonging to them. I could not help telling you that little anecdote which Mr. Lowell gave to the students of the Middle Temple, and I recall at this moment another statement which he gave to them. He told this experience. Speaking of professions and the difficulty of making a selection of a profession, he told of a friend of his in America who had an only son, and who was very anxious for his future, and for the profession that he should enter into. This friend did not wish his son to enter into that profession blindly, and so he subjected his son to a test. The test was to shut him up in a room alone with a Bible, an apple, and a twenty-dollar note. If he took to the Bible he was to be a clergyman, if the apple attracted him he was to be an agriculturist, and if the note was taken charge of he was to be a financier. After a few minutes, the father came back, and he found that his son had made the most of the opportunity; he was sitting on the Bible, he had eaten the apple, and he had pocketed the note. (Laughter). "I will make a politician of him," said the father; and he did so, and the boy was a success. (Applause).

After the proceedings in the theatre had terminated all the guests adjourned to the Park, and as many as could found shade under our few trees, or in the enclosure reserved for the nursing staff.

The band of the 2nd Life Guards performed at intervals during the afternoon. The programme of music was well selected for the occasion and admirably rendered.

During the whole of the afternoon the visitors wandered at will, through the museums, laboratories and wards. The new balconies in the surgical building attracted much favourable comment.

Tea was served in the quadrangle adjoining Astley Cooper, and seemed to be as popular an institution as ever, judging by the crowd attracted there.

A most enjoyable afternoon terminated with the National Anthem just before six o'clock.

PROGRAMME OF MUSIC.

Band of H.M. 2nd Life Guards (by permission of Col. Sir Audley Neeld, Bart., C.B., M.V.O.).

March, "A Sciantosa" (Kaiser); Overture, "Fra Diavolo" (Auber); Walzer, "Bleue" (Margis); Selection from Wagner's Operas (Arr Godfrey); (*a*) Gavotte, "Mignon" (Thomas); (*b*) Minuet Op. 14 (Paderewski); Piccolo Solo, "Lilliputian" (Musician Jesse) (Brewer); Selection, "San Toy" (Jones); March, "Hail to the Spirit of Liberty" (Sonsa); Selection, "Reminiscences of Gounod" (F. Godfrey); Walzer, "Morgenblatter" (Strauss); Morceau Mignon, "Salut d'Amour" (Elgar); Selection, "Floradora" (Stuart); Three Dances from "Nell Gwyn." 1. Country. 2. Pastoral. 3. Merry-makers (German); Finale, "Stock und Stein" (Zikoff). "God Save the King." Conductor, Mr. Chas. Hall.

Nursing News.

MATRON'S OFFICE.

Miss Hodges, the Assistant Matron, before leaving the hospital to take up her duties as Matron of the Cumberland Infirmary, Carlisle, was presented by the members of the Nursing and Administrative Staff with a pretty silver tea service and oak tea-tray, a brass and copper tea-kettle by one of the senior nurses, and a pair of silver salt cellars and spoons by the servants, as an expression of esteem for her work whilst among them, and as a token of their sincere wishes for her happiness and success in her new work.

Miss Priscilla Harding, Sister Priscilla, who has acted as the Medical Night Sister for nearly two years, has been appointed to the post of Assistant Matron at Mill Road Infirmary, Liverpool, and will be leaving the hospital shortly to take up her new duties.

Miss Jeannie Gray, Sister Jean, who has acted as the Surgical Night Sister for eighteen months, has been appointed Night Superintendent of the Cumberland Infirmary, Carlisle, and left the hospital on Wednesday last for a short holiday previous to taking up her new duties.

Although much regret is felt by the nursing staff at both Sister Priscilla's and Sister Jean's departure, we heartily congratulate them on their appointments, and

wish them every success and happiness in their new work.

Miss E. M. Studdert, Head Nurse in Patience ward, who entered the Hospital in January, 1898, as a Probationer, has been appointed Probationary Surgical Night Sister. Nurse Watson Wood, Head Nurse in Cornelius, has been transferred to Patience, and Probationer Sutton has been appointed to succeed her as Head Nurse in Cornelius ward,

Sister Violet, Miss Carey, left the hospital on the 13th inst. on completion of her three years' training to take up work at Queen Charlotte's Hospital.

Nurse Ellis, late Head Nurse in Patience ward, has been appointed Ward Sister at the Cumberland Infirmary, Carlisle.

Nurse Oldham, Head Nurse in the Isolation ward, left the hospital on the 15th inst., having completed her three years' training, and will take up her duties at the Private Nurses' Institution shortly.

Nurse Pitman, Head Nurse in the Surgery, left the hospital on the 19th inst., on completion of her three year's training, to take up her work on the Private Nursing Staff. Probationer H. Clark has been appointed to succeed her as Head Nurse in the Surgery.

Probationer Coleclough has been appointed Head Nurse in the Ophthalmic wards.

Reviews.

The price of books submitted for review should in every case be stated.

The Commonwealth of Cells. By H. G. F. Spurrell, B.A. Oxon. (Bailière, Tindall & Cox).

In a series of essays the author attempts to deal with the physiology of the body in a manner that will be intelligible to the casual reader. Some of his headings are:—"Living Matter," "The Mechanics and Physics of the Body," "The Nervous System." It is difficult to gather what impressions are formed by the lay mind when confronted with such technical matters dealt with in the so-called "popular science" style.

The book is, however, entertaining, and well repays perusal, while the illustrations, though extremely diagramatic, and accordingly often lacking in proportion, are numerous and sufficiently intelligible. Some of the author's views are debatable, nor does he quote authorities, but the reader for whom he caters is not likely to have to force his ideas on the unbelieving examiner.

Dental Surgery, including Special Anatomy and Pathology. By Henry Sewill, M.R.C.S., L.D.S. Eng. Fourth edition.

To the dental student it has always been a matter of difficulty to know in what books he should begin his reading, and this has been the case not only in the general subjects of anatomy, physiology and surgery, but also in those special subjects of dental anatomy and dental surgery. The former of these two last mentioned is, indeed, but too often a sealed book to him until a few months before his final examination.

We have seen no book which so fully meets the requirements of a first year's dental student as Mr. Sewill's Dental Surgery, and perhaps the most useful part is that which treats of Dental Anatomy and Histology.

In these first few pages are included the fundamental facts of the subject, and after their assimilation the somewhat involved sentences of Mr. Charles Tomes will, we feel sure, appear more lucid, and the genuine worth of his work will be more appreciated.

Of the dental surgery proper, the chapter on Caries, illustrated by numerous photo-micrographs, is, perhaps, the most valuable, but the text throughout is good, and with numerous illustrations fully carries out the aim of the editors, which has been, as they tell us, "To supply all the information needed by the surgeon or practitioner of medicine, and to provide a solid foundation of knowledge for students intending to devote themselves to the practice of Dental Surgery."

Sport.

Cricket.

GUY'S v. GRAVESEND.

Played at Gravesend on July 3rd. Guy's had a weak team, and before lunch had lost seven wickets for 87, but Norton after lunch batted very well, and Cowper staying with him till 220 was up, hit hard for an excellent 52. Guy's declared at 255 for nine wickets, Norton being out for 92.

On Gravesend going in, Guy's soon felt the lack of more of their regular bowlers, but by the close six wickets were down for 168. Troughton hit hard and was not out at the close with 94 to his credit. Dr. Bryden kindly entertained the teams at lunch as in former years. Scores:—

GUY'S.

G. S. Graham-Smith, b Liddell	10
F. Morres, c C. Castley, b Liddell	8
H. M. Langdale, run out	22
R. C. Poyser, b Liddell	2
E. A. Collins, c Troughton, b Castley	2
A. R. Wilson, c Young, b Castley	9
S. B. Bowle, b Troughton	24
E. L. Norton b Young	92
C. M. L. Cowper, b Liddell	52
G. Bartlett, not out	16
Extras	18
Total (9 wickets)	255

W. H. S. Burney did not bat

GRAVESEND.

T. G. Castley, c Cowper, b Poyser	28
L. W. H. Troughton, not out	94
F. Boorman, c Langdale, b Wilson	1
L. C. Troughton, b Wilson	0
Dr. Bryden, b Wilson	0
—. Randolph, b Norton	20
B. Tabram, c Morres, b Poyser	8
C. C. Castley, not out	5
Extras	12
Total (6 wickets)	168

—. Young and —. Liddell did not bat.

GUY'S v. UPPER TOOTING.

This match was played at Honor Oak Park on Saturday, July 6th, resulting in an easy win for Guy's by 286 runs. Scores:—

GUY'S.

H. D. Wyatt, run out	24
H. M. Langdale, c & b Lindsay	5
R. C. Poyser, lbw, b White	63
E. L. Norton, c & b Bond	11
G. S. Graham-Smith, c Hosken, b Lindsay	55
A. R. Wilson, c Hosken, b Lindsay	8
M. C. Wetherell, b Lindsay	0
F. Morres, c Hosken, b Lindsay	17
T. A. Chignell, not out	75
E. A. Bignell, b Lindsay	0
E. Morgan, not out	73
Extras	12
Total	347

UPPER TOOTING.

D. H. Butcher, b Wetherell	18
L. F. Hosken, b Wetherell	10
A. H. Parey, not out	18
W. W. White, st Graham-Smith, b Poyser	0
C. B. Lewis, st Graham-Smith, b Poyser	0
J. H. Lindsay, b Poyser	0
H. J. Bond, b Poyser	0
D. C. Franks, b Poyser	3
G. W. Firman, run out	1
H. Tanner, c & b Poyser	7
A. H. Rollard, st Graham-Smith, b Poyser	0
Extras	4
Total	61

GUY'S v. ST. BARTHOLOMEW'S.

INTER-HOSPITAL CUP.—FINAL TIE.

The final Cup-tie was played at Honor Oak Park on July 11th and 12th.

Bart.'s went in first on a splendid wicket, and by dint of some fairly level scoring, compiled the very respectable total of 259, for which they were batting for just under four hours. Anderson was top scorer with 49, he played very careful and steady cricket before being bowled by Wyatt. Poyser had the best bowling average, securing four wickets for 55.

Guy's started as usual with Wyatt and Barber, both played excellent cricket and put up 87 before Wyatt was secured in the slips. On Langdale joining Barber the rate of scoring increased, Barber in particular treating the spectators to some lively cricket. When Barber reached his 100 a short interval was taken for tea. On resuming Langdale was soon taken in the slips for 52—two for 232. Poyser now joined Barber and remained till the close of play, the score then being 307, Barber not out 163, and Poyser not out 32. On resuming on Friday wickets at first fell rapidly. Barber only added 17 to his overnight total, being caught at the wicket for 180. His was a grand innings, though perhaps a trifle lucky at first; afterwards he laid about him with great effect, his innings is a new record for inter-hospital ties. Graham-Smith played well later for 65, the innings closed for 475.

Bart.'s, in fifteen minutes before lunch, scored 17 without loss. After lunch no one could commence to play Poyser, and a wonderful rot set in, all being out for 54. Poyser got 7 wickets for 18, and Wetherell 3 for 23. Thus by 3.30 p.m. we had secured the Cup by an innings and 162.

REMARKS.—Barber's splendid innings, ably backed up by several other members of the team, enabled Guy's to establish a new record for the final tie. A tiring time in the field had affected Bart.'s, and Poyser, bowling with grand effect, finished off the match by half-past three. Mention should be made of Graham-Smith's wicket-keeping, during the match he secured six victims, and only let 12 byes pass. Scores:—

ST. BART.'S

1st innings.		2nd innings.	
C. F. Nicholas, c Morgan, b Poyser	27	b Poyser	0
W. E. Honiball, b Poyser	22	c Morres, b Poyser	1
W. S. Nealor, st Graham-Smith, b Poyser	1	c Foster, b Wetherell	20
C. A. Anderson, b Wyatt	49	c Morres, b Wetherell	8
H. N. Burroughes, c Wetherell, b Wyatt	24	lbw, b Wetherell	4
C. M. H. Howell, b Morgan	42	c Foster, b Poyser	0
G. G. Ellett, b Morgan	20	st Graham-Smith, b Poyser	1
L. Orton, not out	29	st Graham-Smith, b Poyser	17
H. E. Stanger-Leathes, b Morgan	3	not out	0
G. F. Page, st Graham-Smith, b Wyatt	7	c Graham-Smith, b Poyser	2
G. H. Adam, lbw, b Poyser	16	c Graham-Smith b Poyser	0
Extras	19		1
Total	259		54

GUY'S.

H. D. Wyatt, c Honiball, b Howell	46
H. Barber, c Orton, b Adam	180
H. M. Langdale, c Adam, b Nealor	52
R. C. Poyser, c Stanger-Leathes, b Adam	39

G. S. Graham-Smith, c Burroughes, b Page	65
F. Morres, c Anderson, b Page	30
A. R. Wilson, b Stanger-Leathes	0
M. C. Wetherell, lbw, b Page	27
A. L. Foster, c Nealor, b Page	9
E. Morgan, c Anderson, b Stanger-Leathes	9
C. M. L. Cowper, not out	0
Extras	18
Total	475

GUY'S v. ENFIELD.

This match was played at Honor Oak Park on July 13th. Enfield won the toss, and by the aid of some bad fielding and good luck, put up 113 for the first two wickets. After lunch Guy's fielding improved, and the innings closed for 206.

Guy's were all dismissed for 201, thus losing the match by 5 runs. Wyatt and Collins played well, but could not save the game. Scores:—

ENFIELD.

F. Rowley, run out	75
L. J. Conves, c Collins, b Cowper	14
A. H. Smith, b Wyatt	23
G. M. Pratt, not out	34
—. Buckenham, lbw, b Wyatt	0
—. Nice, lbw, b Wyatt	0
F. L. Toms, c Cowper, b Harris	41
R. Goring-Thomas, b Cowper	1
—. Jones, b Cowper	3
L. M. Leggatt, c Wetherell, b Wilson	5
R. Pratt, b Cowper	2
Extras	8
Total	206

GUY'S.

C. M. L. Cowper, b Leggatt	15
F. Morres, lbw, b Leggatt	0
H. D. Wyatt, c Leggatt, b Rowley	72
R. C. Poyser, c Leggatt, b Buckenham	7
E. A. Collins, c Pratt, b Buckenham	47
E. L. Norton, b Buckenham	5
J. A. Chignell, b Buckenham	10
M. C. Wetherell, lbw, b Buckenham	6
—. Harris, b Buckenham	0
A. E. Cawston, b Nice	3
A. R. Wilson, not out	6
Extras	30
Total	201

Guy's Hospital Lawn Tennis Club.

THE JUNIOR
INTER-HOSPITAL LAWN TENNIS CUP.

This cup was played for at Honor Oak Park on July 9th, 10th and 11th, in lovely weather. In the first round, Guy's beat St. George's (the holders), after a very even game. In the second round, however, Guy's went down before St. Thomas's, who eventually beat St. Mary's in the final. The cup, therefore, goes to St. Thomas's. As regards the team, as a whole, it was decidedly weak, and the only redeeming feature was Chignell, who played by far and away the best tennis. Considering the great number of men who play tennis at Guy's, and the facilities they have for doing so, it is a matter for great regret that more interest is not taken in the game. It was very difficult even to raise a team for the cup-tie, and matches are constantly being scratched on account of the difficulty of getting a six together. Until more keenness is shown in the game, both tennis cups will remain at other hospitals. Details:—

FIRST ROUND.

Singles—Guy's and St. George's Hospitals drew, with three sets each. Score: G. A. Jones, St. George's, beat Bacon, Guy's, 6–2, 6–2; Chignell, Guy's, beat H. S. Faber, St. George's, 6–4, 6–2; J. Blake, St. George's, beat Steele-Perkins, Guy's, 10–8, 6–4; Pinching, Guy's, beat Welford, St. George's, 6–2, 6–4; Wylie, Guy's, beat Rutherford, St. George's, 6–1, 6–2; St. Clair Smith, St. George's, beat Pye-Smith, Guy's, 1–6, 6–1, 6–2.

Doubles.—Guy's beat St. George's, by five sets to two. Score: Bacon and Chignell, Guy's, beat G. A. Jones and J. Blake, St. George's, 6–8, 11–9, 6–3; Bacon and Chignell, Guy's, beat Faber and Rutherford, St. George's, 6–4, 6–2; Bacon and Chignell, Guy's, beat Watford and St. Clair Smith, St. George's, 6–1, 6–1; Steele-Perkins and Pinching, Guy's, beat Faber and Rutherford, St. George's, 6–2, 8–6; Steele-Perkins and Pinching, Guy's, beat Watford and St. Clair Smith, St. George's, 2–6, 6–2, 6–2; Jones and Blake, St. George's, beat Wylie and Pye-Smith, Guy's, 6–0, 6–0; Watford and St. Clair Smith, St. George's, beat Wylie and Pye-Smith, Guy's, 6–2, 4–6, 8–6.

SECOND ROUND.

Singles.—St. Thomas's beat Guy's by five sets to one. Score: Wootton, St. Thomas's, beat Bacon, Guy's, 6–1, 6–4; Chignell, Guy's, beat Rawes, St. Thomas's, 6–1, 6–2; Evans, St. Thomas's, beat Steele-Perkins, Guy's, 6–2, 4–6, 6–1; W. Raby, St. Thomas's, beat Pinching, Guy's, 6–1, 6–4; Bridges, St. Thomas's, beat Wylie, Guy's, 6–2, 6–4; Hodgkin, St. Thomas's, beat Pye-Smith, Guy's, 6–1, 6–3.

Doubles.—St. Thomas's beat Guy's by three sets to love. Score: Wootton and Evans, St. Thomas's, beat Bacon and Chignell, Guy's, 6–2, 6–2; Rawes and W. Hodgkin, St. Thomas's, beat Steele-Perkins and Pinching, Guy's, 6–1, 6–1; Raby and Bridges, St. Thomas's, beat Wylie and Pye-Smith, Guy's, 6–3, 3–6, 6–4.

THIRD ROUND.

St. Thomas's beat St. Mary's.

GUY'S v. HAROLD.

This match was played at Gipsy Hill on Saturday, July 13th, and was not finished. The Hospital had a rather weak team, but the score was four all when we

were obliged to return home. Bacon and Holmes played from shortly after three till nearly seven o'clock, and only succeeded in finishing two matches. The results were as follows:—B. H. Wedd and E. N. Jupp beat A. C. Ransford and A. B. Ransford, 6–2, 6–2; beat J. Bates and S. H. Harrison, 6–3, 6–2; beat A. Bright and L. Oldfield, 6–2, 6–3; H. Bacon and T. E. Holmes beat Bright and Oldfield, 7–5, 7–9, 10–8; lost to Bates and Harrison, 6–2, 5–7, 8–10; C. D. Pye-Smith and Wylie lost to Ransford and Ransford, 2–6, 3–6; lost to Bates and Harrison, 2–6, 2–6, lost to Bright and Oldfield, 1–6, 5–7.

Guy's Hospital Rifle Association.

UNITED HOSPITALS' CHALLENGE CUP.

Shot at Bisley, 11th July, 1901. Team:—

GUY'S.

Cooper	37
Felton	42
Glover	36
Pearson	42
Robinson	43
Travers	35
Total ...	235

St. Thomas's won with 247 points.

Guy's Hospital Swimming Club.

INTER-HOSPITAL POLO CUP.—2nd ROUND.

GUY'S v. ST. BARTHOLOMEW'S

This match was played at St. George's Baths on Thursday, July 4th. Bart's proved too strong, and won by 4 goals to 1. They scored the four goals in the first half, and although they tired in the second half, Guy's were only able to score once by means of Moon. Team:—

GUY'S.—H. Bacon (goal); J. Cameron, R. J. Elkins Green (backs); L. U. Ransford (half-back); H. N. Grose, A. L. Moon, T. B. Layton (forwards). Referee: J. Wallace, St. Thomas's Hospital.

Appointments.

MEDICAL SCHOOL APPOINTMENTS.

The following appointments have been made by the Medical Council and approved by the House Committee:—

Clinical Assistants in Medical Wards.—Messrs. A. D. E. Kennard (Dr. Hale White); A. W. Soper (Dr. Perry).

Ophthalmic Dressers.—Messrs. H. C. Keates (August 1st, Mr. Higgens); R. D. Smedley (September 16th, Mr. Higgens).

Surgeons' Dressers.—Messrs. F. M. V. Smith, C. H. Denyer, A. P. Piggot, C. M. L. Cowper, H. R. Grellet, G. S. Robertson (Mr. Howse); G. T. Wrench, E. Faulks, H. T. Palmer, K. Anderson, C. H. Robertson, H. Tipping (Mr. Lucas); A. W. Iredell, J. D. Pearson, J. B. Copland, L. H. Moiser, C. M. Murray, E. H. Griffin (Mr. Golding-Bird); C. J. Pinching, O. W. Richards, S. L. Pallant, W. E. J. Tuohy, W. L. M. Day, G. W. Smith (Mr. Jacobson).

Externs.—Messrs. A. Pearson, A. C. Osburn, F. H. Parker, F. L. Thomas, P. N. B. Odgers, C. H. Gask (August); T. M. Smith, N. N. A. Houghton, C. R. Howard, G. E. Malcomson, R. T. Collins, W. W. C. Jones (September); B. Churchill, J. F. Douse, L. G. Nash, G. W. C. Hollist, E. Roberts, J. W. Gromitt (October).

Dental Surgeons' Dresser.—Mr. W. C. Lewis (October-November).

CIVIL.

ALEXANDER, K. B., L.R.C.P. Lond., M.R.C.S., has been appointed Resident Medical Officer of the Bolingbroke Hospital, Wandsworth Common, S.W.

ANDERTON, J. E., L.R.C.P. Edin., has been reappointed Medical Officer of Health of the New Mills (Derbyshire) Urban Sanitary District.

MEACHEN, G. NORMAN, M.B., B.S. Lond., M.R.C.P. Edin., M.R.C.S., has been appointed Clinical Assistant to the Hospital for Diseases of the Skin, Blackfriars, S.E.

NAVAL.

Surgeon A. J. WERNET, R.N., has been appointed to the *Pembroke* for disposal.

Birth.

COLLIER.—On July 7th, the wife of H. W. Collier M.B., B.S. Lond., of Lee Park, Blackheath, of a son.

Marriages.

KEY—KNOWLES.—On July 3rd, at St. Paul's, Portman Square, W., by the Rev. J. C. Martin, Southsea (uncle of the bridegroom), assisted by the Rev. W. H. Griffith Thomas, Martin Aston Key, B.A., M.B., B.C. Cantab., only son of Commander B. H. Key, R.N., to Edith, daughter of the late Thomas and Mrs. Knowles, of Bradford, Yorkshire.

THORPE — VEALE. — On July 6th, at Emmanuel Church, Plymouth, by the Rev. G. B. Berry, William George Thorpe, M.D., to Alice Rose, daughter of the late William E. L. Veale.

Deaths.

DE'ATH.—On July 7th, at Buckingham, Hanby De'Ath, L.R.C.P. Lond., M.R.C.S., aged 39 years.

SOPER.—On July 2nd, Hugh Thomas Burrell, aged 21, the dearly loved son of William Soper, M.R.C.S., of 307, Clapham Road, London.

ED.—F. G. G.

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Guy's Hospital Gazette.

AUGUST 3, 1901.

Pneumothorax.

CLINICAL LECTURE BY Dr. HALE WHITE.

June 5th, 1901.

Gentlemen,—There is a patient coming into the theatre directly, as I want you to see him In the meantime, I might tell you one or two things about his disease, for the discussion of which his presence is not necessary.

He is suffering from a pneumothorax. Now just think for a moment of a few facts about the chest. The lungs, as you know, are constantly tending to retract. They are elastic, and you know that if you open the healthy chest they do retract. The reason why they do not retract when the chest is closed, is because the parietal surface of the pleura and the pulmonary surface of the pleura cohere; they are both slightly moist and so they cohere. It has been estimated, as a result of experiments, that the force of retraction which tends to collapse the lungs is about 7 millimetres of mercury; and the force of cohesion between the parietal and pulmonary pleuræ is about 12·5 millimetres of mercury. So that there is a stronger force of cohesion between the parietal pleura and the pulmonary pleura than there is force tending to retract the lung. In a pneumothorax, what happens is that the air gets in between the two surfaces of the pleuræ, and that, of course, prevents their cohering by their moisture; and that means that the force which should keep the parietal and the pulmonary pleuræ coherent is neutralised, and the force of 7 millimetres of mercury, in virtue of which the lung by its elasticity will retract, immediately comes into play, and the lung retracts. It has been calculated that a healthy lung retracts, under these circumstances, to one-eighth of its former bulk. If, then, owing to air coming between the two pleural surfaces, the force of cohesion is overcome so that the pulmonary retracting force comes into play, and thereby the lung is reduced to one-eighth of its former size, the result, of course, must be great dyspnœa.

The other mechanical fact to be thought about is, What happens to the heart? Inasmuch as in health both lungs are tending to retract, to draw away from the heart, to fall away from it with a force equal to 7 millimetres of mercury, it follows that the heart is virtually, as regards the lungs, held in position, you might say, by two elastic bands. But supposing I have a pneumothorax on one side, then the elastic lung retracts on that side and ceases to be elastic, so that the elastic band on the other side drags the heart over. Therefore, unless there were adhesions holding the heart in position, there never was a pneumothorax that was not accompanied by the dragging of the heart away from the side on which the pneumothorax existed.

Many things happen as a result of what I have explained to you. Supposing an aperture has been made so that the air can rush into the pleural cavity, the air will clearly enter the pleural cavity during inspiration, until the atmospheric pressure in the pleural cavity equals the atmospheric pressure in the lungs. After that it can only enter during expiration.

The next point is, supposing the patient gets well, what happens? That is very difficult to understand; we do not understand much about it. There is no doubt that a pneumothorax may get perfectly well and the air may be absorbed from the pleural cavity. I do not know of any conclusive proof as to whether it is taken up by the vessels or the lacteals, or exactly how it is got rid of. All I know is that the oxygen goes first, and therefore if the pneumo-

thorax has lasted some time the air in it is composed chiefly of nitrogen and carbonic acid gas. From the considerations which I have just brought before you we shall be able to deduce the symptoms.

Here is the patient. He was admitted, as you might expect, for severe dyspnœa and sudden pain—severe dyspnœa, because suddenly he is deprived, owing to the collapse of the lung, of a large quantity of lung; and also pain, because the air entering the chest stretches the soft parts of its walls. His heart is dragged over to the opposite side; this leads to more stretching, and therefore severe pain is a very prominent symptom.

Well, now, the commonest cause of pneumothorax is phthisis. Some 80 or 90 per cent. of the cases are the result of rupture of a phthisical cavity into the pleural cavity, and the air passes down through the bronchi and through the rupture into the pleural cavity. Therefore, you are not surprised to hear that this man has had a cough and hæmoptysis for some months before he came into the hospital.

The next thing to notice is, that he went to bed on May 21st, in his usual health. During the night he was suddenly taken with an attack of severe pain in the chest. The pain did not appear to be localised to any spot, but it was very severe. He then found he was suffering from severe breathlessness, and this severe breathlessness has persisted, and as it has got no better he was brought up to the hospital. There you have a perfectly typical history of a case of pneumothorax—a man who has obviously got symptoms of phthisis, suddenly attacked with severe dyspnœa and pain in the chest. The shock sometimes at the onset of a pneumothorax may be so bad that the patient quite sweats with the agony, and the dyspnœa is very striking. This patient is in great distress. His dyspnœa must be obvious to you all. If you watch his breathing you will see that it is very rapid, and the breaths are very short. At the present time he breathes fully 60 to the minute. He has more dyspnœa than any other patient in the ward at the present time. He cannot possibly lie down; and that reminds me to point out to you that patients with pneumothorax sit up, because of their breathlessness.

These patients commonly have, like the man before you, a rapid pulse, probably due, in part, at least, to the dragging over of the heart and pulling it out of its place. His pulse is nearly 100 at the present time.

Notice that the want of breath leads to great difficulty in speaking. If I speak to him you hear his reply is a mere whisper. Owing to his difficulty of breathing, he cannot get a sufficient current of air out through his larynx to make the vocal chords vibrate enough to speak. Of course you will remember that the symptoms must vary in different cases. You must not expect all cases of pneumothorax to be as bad as this. For instance, supposing the phthisis has destroyed the greater part of the lung tissue on the opposite side, it is quite clear that the pneumothorax would produce very severe symptoms indeed. On the other hand, supposing air only gets into the pleural cavity very gradually, or owing to the presence of adhesions into but a small part of the pleural cavity, then the symptoms will not be severe. Or again, what is clinically important and very often overlooked, is that if the patient is moribund with phthisis, as is frequently the case, then he does not react, he is too ill to feel the pain of the pneumothorax, his vitality is so low that he does not complain of symptoms strongly directing attention to the fact that he has got a pneumothorax. In such a condition it is by no means infrequent for the patient to be unaware of any extra symptom following his pneumothorax, and the physical signs may be discovered quite accidentally in making a routine examination.

You see from this chart that this patient's temperature is raised. Often it is, because of the phthisis, raised before the rupture takes place, then the shock may bring it down; but it soon rises again.

Naturally the patient gradually gets accustomed to the new condition of his chest, and the symptoms are not so severe after a few days as they are later.

Now about the physical signs. I think all of you who are near, at any rate, can see that the

affected side is motionless. The unaffected side, that is the right side, is moving well. So that immobility is one striking thing.

Then another thing is, that as the pleural cavity on this left side (indicated) is full of air, it gets a little over-distended and in this patient it measures one inch round more on this side than on the other, and thus I prove to you that the affected side is a little over-distended.

The next thing is that the air in the pleural cavity distends the intercostal spaces. You will notice that the intercostal spaces are obliterated on the affected side. Owing to this general pushing out of the chest, sometimes the shoulder on the affected side is a little elevated. So that the effects on the chest often are: that it is motionless; as a rule the shoulder is a little raised; and there are no visible intercostal spaces and the chest is a little distended.

Well, then, as to the mechanical effects on the heart. I have spoken to you already as to that. The mechanical effect on the heart is that it is dragged over to this right side (indicated) because the elasticity of this right lung is in play and the elasticity of the left lung is not. Usually speaking, we feel the cardiac beat on the unaffected side. In this case we do not feel the beat easily, for the heart is probably not dragged straight across; perhaps there are adhesions. Then when the heart is dragged across we cannot hear the sounds well on the affected side, but we hear them better on the side on which there is no pneumothorax. So remember the beat of the heart is felt and the heart-sounds are usually best heard on the side of the chest opposite to the pneumothorax.

Then again, if the pneumothorax had occurred on this right side (indicated) the liver might have been pressed down by the air distending the chest. Occasionally the spleen is pressed down when the pneumothorax is on the left side.

Before leaving these mechanical effects let me again remind you that it is often impossible to correctly estimate the extent of the pneumothorax. Very often in these cases there is a considerable amount of pleurisy, and the pneumothorax is only over a small area of the chest. The effects I have given to you are naturally more marked the larger the pneumothorax.

Coming now to other physical signs, the tactile vocal fremitus is diminished on the side of the pneumothorax. It is so in our patient. Then as to percussion. As you might expect, the percussion note is not dull. Very often it is about normal. Often it is hyper-resonant. (Here the chest was percussed.) I selected the percussion in that spot (indicated) because the next thing I want to draw your attention to is, that, owing to the heart being dragged over to the unaffected side, the cardiac area has become hyper-resonant. Here, right over the middle of the cardiac area, the note is hyper-resonant, so that you find a hyper-resonant note over the cardiac area. If the distension of the chest by the air is very great the hyper-resonant note may extend slightly over to the unaffected side.

It is said you occasionally can elicit a cracked-pot sound. That I have never detected in our patient, but it might easily be present. As to other physical signs, they are perfectly characteristic. You have here (indicated) a large air-containing cavity which gives a metallic twang to many sounds. If you listen to that man's cough with the stethoscope the cough is metallic, if you listen to his breathing on the affected side that breathing is of a metallic character, and any râles that may be present are tinkling; these metallic sounds are very striking in this man, and once you have heard them I think you can never forget them. If he talks and you listen to his chest you will notice a metallic twang about the voice. Sometimes even the heart sounds have a metallic twang about them. You have another sound which is characteristic in these cases, and that is, a bruit d'airain. When you percuss him over the pneumothorax with two coins, on the chest, and at the same time listen near the coins, the sound produced is like a bell. This sign is very often present. It is present in the two cases which we have to consider to-day.

Those are all the signs of pneumothorax, but they are not all the physical signs presented by this patient, because what usually happens is this: Through the aperture in the lung bacteria get into the pleural cavity, they set up pleurisy and fluid collects, so that you soon get the signs of fluid added to those of pneumothorax.

As the fluid collects naturally at the bottom, so dulness and other signs of fluid begin to appear at the bottom of the chest. It is so in this patient. Thus he has a mixture of air and fluid in his chest. When fluid and air are present in these cases, and you shake the patient while your ear is on the chest, you hear a splashing, the result of the shaking up of the air and the fluid. The fluid is often very large in amount, because owing to the diaphragm in a case of pneumothorax doing no work, it is flaccid, and therefore the fluid easily pushes it down.

We will now discuss the causes and prognosis and other points in connection with pneumothorax. By far the commonest cause is phthisis. In from 80 to 90 per cent. of all the cases of pneumothorax, what happens has been this. There has been some tubercular change, usually caseous, approaching the surface of the lung, and the pleurisy has not been sufficient to cause the parietal and the pulmonary pleuræ to adhere. Then the caseous nodule ulcerates into the pleural cavity, the air rushes in, and the pneumothorax is produced.

The next most common cause is an empyema. There has been a rupture into the lung of the empyema and the air rushes through the aperture into the pleural cavity in that way.

Perhaps the third most common cause is a wound, but fortunately it is rare. I have already mentioned to you that in health the parietal and pulmonary pleural surfaces adhere. Now, a stab in the chest will go right into the lung without tearing the lung away from the parietal pleura, and therefore no air gets in between the parietal and pulmonary pleuræ. But if in making the wound of the lung the lung is pushed away from the chest wall then some air will get into the pleural cavity and a pneumothorax is formed. You say, "Why does not the air rush into the pleural cavity through the wound in the lung." Because usually that is sealed by the blood-clot. And so in these cases as the wound in the chest wall soon closes, the air in the pneumothorax quickly becomes absorbed, even if one forms.

The other causes of pneumothorax are excessively rare although numerous. For instance, it will occasionally occur as a result of an emphysematous bleb giving way during forced breathing effort. It will occasionally occur from gangrene, a piece of lung sloughs and ulcerates and air is let into the pleural cavity. It will occasionally follow an abscess of the lung, or a hydatid of the lung, or a septic infarct of the lung, or rupture of a damaged lung. A man making a great effort in health may even rupture his lung. Or again, in certain cases air from outside enters the mediastinal cellular tissue and then it ruptures through the pleura. I saw a case the other day of pneumothorax which followed cancer of the œsophagus. The cancer ulcerated in the pleural cavity, so that a fistulous communication was made between the œsophagus and the pleural cavity. In the same way I have known a communication take place between the stomach and the pleural cavity. A foreign body in the bronchus has been known to ulcerate and cause pneumothorax. Then I knew a student here who got pleurisy in typhoid fever, and the inflamed visceral pleura ruptured while he was straining at stool, and he got a pneumothorax. Occasionally it has been said that the pus in the pleural cavity will decompose, and gas be given off from it, and so cause a pneumothorax. But all these are merely curiosities, and probably many of you will never come across any causes of pneumothorax other than the first three I gave you, namely, phthisis, empyema, and injury.

About 5 to 6 per cent. of all hospital cases of phthisis get pneumothorax, and it is said to be a little more common in the left side than the right, and it is naturally more common for the rupture to take place at the apex than at the lower part of the lung, because phthisis is common there.

A very important thing to remember is that when pneumothorax follows phthisis, in about 90 per cent. of all the cases micro-organisms get into the pleural cavity, with the result that pleurisy is set up and effusion takes place. So that when a man is going through the usual course of events in pneumothorax, usually fluid appears in his pleural cavity, and he is then suffering from a hydro-pneumothorax, and sooner or later the fluid nearly always becomes purulent.

Here is this patient's temperature chart, and you see that the temperature is suggestive of pus. Therefore, at the present moment the full diagnosis is a tubercular pyopneumothorax. If a tubercular patient gets a pneumothorax it has a curious effect on the lung. Many people think that it actually leads to an increased activity of the tubercular process in the affected lung. If you consider for a moment, that is very unlikely, because the collapsed lung will not have a proper circulation, either of air or blood, and you know that tubercle is carried by the air or the blood. So that really what happens is, the tubercular process in the lung on the side of the pneumothorax is retarded by the collapse of the lung. Therefore, occasionally patients may, if they do not develope a pyopneumothorax, appear better after their pneumothorax. I know of a tubercular case that did very well indeed after a pneumothorax had formed. But, of course, a pneumothorax is a serious thing, and it is a bad thing for the patient to have pus in his pleural cavity. General lowering in health due to the formation of the pyopneumothorax not infrequently leads to an increase of the tubercular process on the opposite side. On the affected side the tendency of a pneumothorax is, as I have just said, to diminish the activity of the tubercular process.

The next point for us to discuss is the prognosis in these cases. The prognosis, I need hardly say, is bad. Obviously a man is not in robust health when he has phthisis, and I have already told you that in 90 per cent. of the cases of pneumothorax fluid collects and sooner or later becomes purulent. So that the outlook is, as a rule, bad, and I am afraid it is so in the present case. Whether or not the outlook is bad, I think, depends entirely upon whether or not fluid is effused, and occasionally cases do well. I knew a doctor who had the misfortune to get a pneumothorax, but he has got perfectly well from that, and he is now in very good health indeed. We can only suppose that in such a case, if any fluid was thrown out, it was not markedly purulent. So that the whole essence of the prognosis is: is much fluid thrown out, and if so, is it purulent, and is the man likely to get poisoned by the septic organisms in the fluid in the pleural cavity?

One of the first persons to direct our attention to the study of pneumothorax was Dr. Hughes, who was a physician here about sixty years ago. He published two papers on the subject, one in 1844 and one in 1853. One great point that he made was a point that I have been trying to get you to remember, namely, that on the affected side the activity of the tubercular process in the lungs becomes less. He also urged what I have been urging, that though the prognosis is, as a rule, distinctly bad in pneumothorax, it is not necessarily so, because it depends on the amount and character of the fluid effused.

Here are the Guy's Hospital Reports for 1853, containing Dr. Hughes' paper, and in it is the remarkable case of a man who went about three years, even although some fluid was effused. Let me read you what Dr. Hughes says, "I have seen a young gentleman who lived at least three years and two months, and, who during a great portion of that time, so far from being confined to bed, was in the constant habit of riding up to town from Lewisham to his business, and who was accustomed to agitate his body, and thus produce the phenomena of succussion, for the amusement of his friends." We may conclude that the fluid effused into the chest of this young man who was accustomed to agitate his body, and thus produce the phenomena of succussion for the amusement of his friends, cannot have been a highly toxic fluid.

There is at the end of Dr. Hughes' paper a remarkable case, which shows how occasionally these cases of phthisical pneumothorax will do well. The patient, a young lady 26 years old, was seen by Dr. Hughes on December 7th, 1850. She then had well-marked signs of phthisis and right sided hydropneumothorax, there was well-marked succussion. The evidence of fluid gradually increased, and on May 20th, 1851, three pints of turbid yellow serous fluid were withdrawn from the right chest. The patient was in all respects much better for a time, but the fluid re-collected, and on July 24th more than three pints of the purulent fluid were withdrawn. "We were surprised to find that the gradual expansion of the lung had followed the gradual withdrawal of the fluid, and that both immediately after the operation, and also upon

a minute examination three days after, no evidence of the presence of air in the pleura existed; but that, on the contrary, the vesicular murmur could be heard to nearly the base of the lung. We were thus led to hope and to believe that the aperture in the pleura, rare as the circumstance might be, had become healed by plastic matter or by adhesion to the costal pleura. Subsequent observations tended to establish this hope, as the symptoms of pneumothorax were never again observed upon repeated examinations during the many months that the patient survived." The patient died ten months later. The post-mortem examination revealed active and extensive phthisis on the left side, and tubercular disease of the crest of the ilium. The phthisical process in the right lung was arrested and in process of cure, there was a portion of the lung firmly adherent to the chest wall, and in this a cavity so near the surface as to be only separated from it "by the adventitious product of membranous inflammation." This you see is a most remarkable case, showing not only that when a phthisical cavity by its rupture causes a pneumothorax, the rent may heal, but also demonstrating the arrest of active disease in the compressed lung. But still, although I have been telling you of cases which have done fairly well, yet remember that in every case of phthisis the onset of a pneumothorax is a very serious business, and generally means that the patient will soon die.

Let us now discuss the treatment. The first thing to do is to relieve the patient's distress and keep him quiet, and therefore you give him some morphia or some codeine. We tried codeine with our patient, but that did not do him any good, and therefore we gave him some morphia. The morphia relieves the distress, and prevents coughing, and induces sleep. But obviously very often you will find that, although morphia relieves the distress, it is liable to cause respiratory failure and lividity and so you must give it with caution and judgment.

We next come to the question as to whether you should interfere surgically in these cases. Certainly you should defer that as long as possible. In the first place, never interfere surgically in these phthisical cases if there is air only in the pneumothorax. In the next place, never interfere surgically to draw off the fluid unless the dyspnœa has become very great indeed, and then aspirate. You will say, "Surely if there is pus there, the correct surgery is to lay open the chest." That is not so. You can never clear the pleural cavity of infective material because there is a hole in the lungs through which organisms are constantly passing, and experience has shown that laying a pyopneumothorax open, and putting a tube in, and treating it as you would an ordinary empyema, will result in the patient going down hill quicker than ever. So that defer interfering with the chest as long as you possibly can, and if the dyspnœa becomes very great aspirate the fluid. (Subsequent experience of the patient who formed the subject of this lecture exemplified the above teaching. The dyspnœa became urgent so the chest was aspirated and more than a pint of pus was withdrawn. He was made neither better nor worse by the operation, and he gradually sank, dying about a month after admission.)

And now for two or three minutes we have got left we will discuss the second cause of pneumothorax, namely, empyema. Here is a chart of a case which, if you will think about, will interest you. It is a chart of a child, aged 15, who a few days before April 26th was taken ill. Dr. Whitty was called in, and within a day or two he diagnosed the case as one of pneumonia. Shortly afterwards she began to cough up pus, and when I saw her she had been ill for a fortnight, and she was in great distress with her breathing. Her right side was immobile, and she had from the apex, both back and front, down to the middle of the right chest, signs of clearing up pneumonia. Below middle she had a very resonant bruit d'airain, and over an area about two inches each way and below the angle of the scapula she had metallic breathing, her cough was metallic, and she had other signs of pneumothorax. The pus which she was coughing up stank so that it almost drove you out of the room when you went into it; she coughed up about one pint a day. She looked ill, and it was evident to both of us that

she was losing ground and sinking. She had diarrhœa, which nothing would check, and which was very suggestive of septic absorption. You see from the chart that her temperature was of the hectic type and very high.

It seemed quite clear to us that what we had to deal with was a pneumococcal empyema, which had ruptured into the lung. I did not think that if I put a needle into the chest that I should draw off any pus, because—and this you must particularly bear in mind—in those cases in which pus is constantly coughed up it is very difficult indeed precisely to say where it is in sufficient quantity to draw it off when an exploring needle is put into the chest, for if a pint of it is coughed up in twenty-four hours, it stands to reason that there is never a large collection for us to tap with a needle. I know no more difficult problem in physical signs than to point out the spot at which a needle can be put in to aspirate the pus when a patient is coughing up a quantity of pus from an abscess cavity. I know the case of a patient under the care of Dr. Jordison and Mr. Duffet, who had been punctured thirty times to find an abscess cavity in her chest. She walked about with a hand-bag, in which she carried a spitting jar because she coughed up so much pus, and though she was punctured in thirty different places, no collection of pus was found, and when last heard of years after the last puncture she still spat up pus. I know of the case of a young man, a son of a well-known doctor, who was repeatedly punctured by able doctors, and again the collection of pus was never found, although he was coughing up pus. I can only repeat that I know nothing more difficult than to tell the surgeon where to cut down on an empyema from which pus is frequently coughed up.

To go back to this particular case before us, I wanted to demonstrate that there was pus present, because we were anxious to show the child's friends that an operation was necessary, so I put a needle into what I thought the best spot, but, as I expected, I failed to draw off pus. As, nevertheless, it appeared that probably we should have to open the chest, the child was put into a nursing home, and I watched her for three days. During that time the diarrhœa increased, the bowels were opened four times in the latter half of one day. She was still losing ground, and the temperature was over 104° in the evening. Therefore I decided to ask Mr. Fripp to see her, with the view of cutting down and trying to drain this pyopneumothorax from the bottom. It was very difficult to tell him where to incise the chest, because it was very difficult to tell precisely the extent of the abcess cavity, or even where it was. But by going over the physical signs very carefully, I thought that the best place for him to cut down was on her left side about the ninth rib, an inch or two external to the angle of the scapula; but to make sure that this was the seat of the abscess, I very much wanted to draw off pus with an aspirating needle before the incision was made; so, in order that a quantity of pus should collect in the pyopneumothorax, and, therefore, it should be more easy to detect, I gave the child a good dose of opium in the evening in order to ensure heavy sleep and no cough during the night. As I hoped, this caused the pus to collect, and when I visited her in the morning an exploring needle inserted just below the ninth rib, a little external to the angle of the scapula, drew off pus, although on previous occasions a needle in the same spot had failed to draw any. Mr. Fripp took away part of the ninth rib, and we came at once upon pus—that thick, light green pus, which is often seen in a pneumococcal empyema. A tube was put in, and, as you can see from the temperature chart, the child has done very well since. She recovered completely; all her signs of septic infection left her directly the pyopneumothorax was drained. Much help in getting the lung to re-expand was derived from making her blow water from one bottle to another, as you have seen patients do in the wards and making her do breathing exercises. Later on, a hilly country at high altitude is very useful, for the ratified air and the ascent of gentle hills both help to re-expand the compressed lung.

Now, I want to direct your attention to a strange fact. You have already seen how very rare it is for the opening in the lung to close up in the case of a tubercular pyopneumothorax,

but in the case of a pneumonic pyopneumothorax the rule is for the opening to close readily. It is hard to say why this should be so but it is almost universally true that tubercular lesions are difficult to heal. A typhoid ulcer in the intestine heals readily and quickly; a tubercular ulcer heals slowly and with great difficulty. In a clinical lecture I gave you last year I pointed out to you that as a rule a pneumonic pyopneumothorax gets well, even when the pus is coughed up through the lung, and I was able to quote to you the case of a feeble man, 72 years old, in whom a pneumococcal empyema formed. At the base of the right lung five ounces of pus were let out by incision, but the patient was not better. A few days later he coughed up several ounces of pus by the mouth; he at once began to mend and made an excellent recovery. Indeed, when you remember how tedious the cure of an empyema after incision may be, it is always worth considering, in any case in which a patient who is coughing up pus from a pneumococcal pyopneumothorax is doing well, whether it would not be a good thing to leave him to get well in that way. But in the case we are considering such a course was impossible, for the child was going downhill from septic infection. She began to improve, and the coughing up of pus stopped directly the pyopneumothorax was drained.

We have now been able to consider pneumothorax depending upon the two commonest causes, viz., phthisis and empyema. It is a subject I wish you to think over, for experience, both as an examiner and teacher, has shown me that students often fail to recognise it, and often believe it exists when it does not.

Chapel News.

The Bishop of Rochester has appointed the Rev. P. H. Bown, late Curate of St. Barnabas, Sutton, as Assistant Chaplain of the Hospital, in the place of the Rev. W. H. Gregory, resigned. Mr. Bown began his duties on August 1st.

ACKNOWLEDGMENTS.—The London Hospital Gazette, St. Mary's Hospital Gazette, The Broad Way, St. Thomas's Hospital Gazette, The Stethoscope, The College of Medicine Gazette (Durham), The Clinical Journal, The Hospital.

A Case of Subacute Carbon Monoxide Poisoning.

S. R., aged 45, leading hand in large engineering works, had been in good health until September 11th. On that day he entered a cold reverberating furnace to repair the brickwork. He noticed an escape from the valve which admitted the water-gas and sent his labourer round to screw it down. The valve was defective and the escape continued. He nevertheless remained lying in the furnace for three hours doing his work. During this time he felt rather faint, and on coming out was unusually tired. He walked slowly home feeling "dead beat." The following morning on rising he "had a job to button his braces," seemed powerless and strange, and wanted no breakfast. He went to his work, staggering along the road like a drunken man; his speech was thick and blurred. The right side of his face and his left leg felt weak. His mates would not allow him to go up the scaffolding to his work, and he went to a hospital where he remained a fortnight without much improvement. He nevertheless tried to resume work about October 2nd, feeling far from well. Noticing from below that some brickwork was being wrongly done he climbed the scaffold to see about it, but on arriving at the top he could not remember what he had come for, though he thought for ten minutes. In speaking to his men he spluttered like a drunken man, a fact of which he was himself conscious, and they had great difficulty in understanding him. He was very shaky and drowsy, and had a sort of air hunger, wanting to be out of doors all day. His appetite was pretty good.

He first came to see me about October 3rd, having again had to give up work. His pupils were unequal, but reacted to light and accommodation. His speech was exactly that of a general paralytic with blurring of syllables and general rounding off of phonetic corners. His tongue was very tremulous, and was quickly withdrawn, but the tremors had not quite the local fibrillar character of G. P. I. He was generally shaky and nervous and soon became confused if questioned. The right knee-jerk was hardly perceptible, the left could not be obtained. No squint or facial paralysis, and no grandiose ideas.

He had been a teetotaller for nine years. There was a history of doubtful syphilis four years ago. He was forbidden to work, and given Mist. Hyd. Perchlor. et Pot. Iod.

A week later he had much improved. His speech was nearly normal, and the most marked remaining symptom was a great intolerance of noise. He recovered entirely after a few weeks in a convalescent home.

Was this a case of cerebral syphilis or was it a toxic condition? My own opinion, for what it is worth, is expressed in the heading of these notes.

Since seeing this case, I believe that I had previously met with, and failed to recognize, slight degrees of the same condition, as the result of exposure to the fumes of

ill-ventilated gas-stoves in suburban houses. Anæmia is not prominent among the symptoms, which are chiefly intolerance of noise, drowsiness, headache, irritability, impaired volition, loss of facial expression, and possibly unequal pupils, slight blurring of speech, and vertigo or uncertain gait.

The subject of chronic gas-poisoning in houses and workrooms seems to be one that might be very usefully discussed in the columns of the Gazette. H.

Pass List.

Final Conjoint Examination, July, 1901.

Medicine, Surgery and Midwifery.—*M. Abdy Collins, *A. C. H. Gray.

Medicine and Surgery.—C. H. Gask, *E. J. F. Hardenberg, G. S. C. Hayes.

Medicine and Midwifery.—*W. H. Brailey, *A. C. Lewis, *G. H. H. Manfield.

Surgery and Midwifery.—W. H. Bowen, C. E. Gaitskell.

Medicine only.—*H. Vale Bagshawe, G. T. Brundrett, H. A. Ehrlich, *E. H. Kitchin, W. O. Roberts, *W. M. Robson, *H. Wacher, *A. Wylie.

Surgery only.—S. C. H. Bent, H. Bentley, G. B. F. Churchill, J. F. Douse, *J. N. Dyson, A. W. Gater, W. P. Ker, F. B. Manser, R. P. Marshall, *B. P. O'Neill, A. Pearson, *R. S. Roper, *E. Stott, *A. R. Thompson, J. A. Wood.

Midwifery only.—J. E. L. Bates, J. D. Bridger, P. D. Hunter, *B. Instone, A. D. E. Kennard, R. C. Lawry, P. J. Nash, F. M. M. Ommanney, B. I. Rahim, H. G. Rashleigh, F. C. Whitmore and M. D. Wood.

* Denotes completion of examination.

University of London, July, 1901.

INTERMEDIATE EXAMINATION IN MEDICINE.

Examination for Honours.

Anatomy (Third Class).—A. M. Webber.

Physiology and Histology (First Class).—A. M. Webber; (Second Class) G. Russell; (Third Class) M. G. Louisson, H. F. Bell Walker.

Materia Medica and Pharmaceutical Chemistry (Third Class).—G. Russell.

Entire Examination.

First Division.—H. H. Carter, J. H. Clatworthy, H. C. C. Mann, G. W. Smith.

Second Division.—C. E. Iredell, A. E. F. Kynaston, B. Moiser, F. Rogerson.

Excluding Physiology.

First Division.—G. H. Rees.

Physiology only.

Second Division.—C. H. Dawe, H. K. Lacey.

School Examinations, July, 1901.

Elementary Anatomy.—T. H. Barton, R. J. Bentley, L. H. Burner, E. M. Harrison, R. P. Lewis, E. C. Lowe, E. F. Milton, O. S. Norton, F. A. Sharpe.

Dental Microscopy.—H. P. Aubrey, J. B. Ball, H. T. Binns, T. Burton, J. Cameron, H. E. Chinneck, A. B. Cocker, H. J. Coish, H. J. Cole, H. S. Cranston, A. D. Crofts, H. Croot, W. C. M. Dickey, J. A. Donald, E. Farrant, F. N. Fox, H. J. Fox, A. L. George, T. H. Griffin, R. H. C. Johnson, H. W. Jones, R. W. Jones, E. E. Lacey, F. H. Lennox-Jones, W. C. Lyne, A. L. Mathews, J. G. Morrell, W. Reynolds, P. Scott, E. O. Stevens, J. Stevens, W. S. Stevens, H. Thacker, T. Vernon, E. White, G. S. H. Barnett, A. H. Bell, J. B. Barron, C. A. W. Buckell, A. R. Beaumont, T. A. Chignell, S. Clifford, H. D. Griffith, R. J. Green, A. E. Holman, W. Henderson, T. C. Holford, W. Giles, W. E. Griffin, C. S. Kliszczewski, H. C. Malleson, C. Mills, W. H. Peatfield, A. E. S. Perkins, F. W. Parfitt, C. L. Palmer, F. R. E. Palmer, E. Phillips, P. J. Reid, J. E. Spiller, A. C. Stroud, A. O. Trotter, H. C. Visick, H. L. Whitlow, J. W. Walton, C. D. Wood, E. H. Wyand.

All dental students who failed to attend the above examination, and also those who were present whose names do not appear on this list, will be required to attend an examination early in October next.

Papers by Guy's Men.

A Case of Intestinal Adhesions Simulating Tumour Formation, and Causing a risk that the Surgeon might tap the Bowel Unwittingly. By John D. Malcolm, M.B., F.R.C.S. Edin.—*Lancet*, 13th July.

Extrauterine Fœtation. By the same.—*British Medical Journal*, 13th July.

Four Cases of Primary Thrombosis of Cerebral Veins and Sinuses in Children. By Theodore Fisher, M.D., M.R.C.P.—*Ibid.*, July 6th.

Experimental Malaria: Recurrence after Nine Months. By P. Thurburn Manson, M.B. (with Chart).—*Ibid.*, 13th July.

Four Clinical Lectures on Some Affections of the Kidney. By A. H. Tubby, M.S., F.R.C.S. Lecture IV. *The Clinical Journal*, July 10th.

A Clinical Lecture on the Treatment of Foul Wounds. By W. Arbuthnot Lane, M.S.—*Ibid.*, 17th July.

A Case of Multiple Malignant Pustules (Anthrax). By R. Lawford Knaggs, M.C., F.R.C.S.—*British Medical Journal*, 20th July.

NOTICE TO CORRESPONDENTS.

The Editor wishes it to be understood that no communications can be inserted which are not guaranteed by the name of the sender. All articles must be written on one side of the paper only.

Obituary.

G. Hanby De'Ath.

IN our last issue we briefly recorded the sad death of Mr. G. H. De'Ath, which occurred on July 7th. He was educated at Westminster School, and entered Guy's in October, 1879, when his eloquence as a speaker, his skill as a mimic, and his warm-hearted, generous nature, very quickly made him one of the most popular men of his time.

Considering that he left Guy's without holding any house-appointment, the impression he made on his contemporaries is very striking, for all are agreed that he was a man of remarkable power.

Mr. De'Ath took up his father's practice, where he rapidly became a practitioner of great reputation and respect; at the time of his death he was holding many public appointments.

The closing words of a memorable and extremely able paper read by Mr. De'Ath, before the Physical Society, on the relationships between the Profession, the Press, and the Public, show the high ideal he set himself in the practice of his profession. "In all our relationships we should remember that kindness, gentleness, and sympathy, add to the true value of skill, and that though the powers of the head are great, the powers of the heart are greater. We can do much by our abilities, but more by affections, and although we now have 'to live in wearied hope,' yet it is not the possible only, but the perfect we should live for, ever bearing in mind that 'greatness is to take the small things of life and walk grandly among them.'"

James Hannay Muncaster.

IT is with deep regret that we have to announce the death of Mr. J. H. Muncaster, at Halifax, on Friday, July 19th, after a very short illness. He was taken ill on the previous Wednesday with hæmorrhage from a gastric ulcer, which eventually proved fatal.

He was the son of the late John Muncaster, Esq., of Laurie Bank, and was born at Whitehaven. As a boy he was educated at Ghyll Bank School, and afterwards at Mill Hill. He became captain of the latter school, and while there took many prizes.

Mr. Muncaster was a Scholar and Prizeman of Clare College, Cambridge, and further distinguished himself by obtaining honours in the Mathematical Tripos.

He entered Guy's in October, 1886, and after holding the usual appointments became house-physician to Dr. Pye-Smith.

He graduated at Cambridge in 1886, and passed the London M.B. examination in 1893.

At Guy's, Mr. Muncaster was very popular. He was a well-read man and a clever conversationalist, and his genial disposition endeared him to his contemporaries and patients alike.

During the last six years he has been in practice at Halifax, where he was very greatly respected, not only by the public, but also by his fellow medical men.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

Army Medical Commission.

DEAR SIR,—I noticed in your last number, your announcement of the appointment of Mr. Fremantle as one of the Secretaries to the Army Medical Commission. Mr. Fremantle, during his term of service in South Africa, has been in so many various units, and has made such excellent use of his well-known powers of criticism and observation, that he cannot but prove to be of great use to the Commission.

An old saw, quite involuntarily, occurs to one in this connection,

"O hair of the dog that bit him."

I remain, yours truly,

ANOTHER CIVIL SURGEON.

An Appeal.

DEAR MR. EDITOR,—Since my arrival at Magila I have been much impressed by the great need of a doctor here, and venture to ask if you will kindly insert this letter in GUY'S GAZETTE, with the hope that someone may be induced to offer his services. Pecuniarily, there is no inducement, as any doctor coming here could only do so on missionary terms, but the work is *most interesting and varied.*

We have a school of 130 resident boys, also there are the native teachers and the European workers, besides outlying stations, at Hologwe—thirty miles distant—there is also a school of resident boys, in charge of Europeans. Nearer Magila are Mkuzi and Misoyne, under the charge of native clergy.

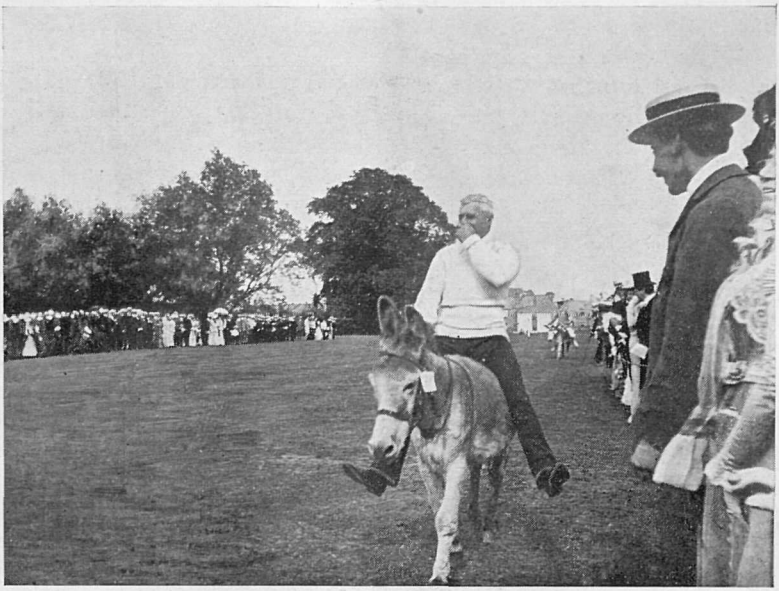
We have large numbers of natives coming to the mission daily for treatment; Nurse Gunn and I have to diagnose and treat them as best we can. Naturally, we work much in the dark, and it is terrible to realize how much suffering the people undergo for want of medical advice.

There are funds in hand for building a Hospital when we have a doctor, and there is immense scope here for one who may feel called upon to do this work for Him who said, "Inasmuch as ye have done it unto them My brethren, ye have done it unto Me." Thanking you in anticipation, I am, Sir, yours faithfully,

U. M. C. A., EDITH FRANKHAM.
Msalabain, Tanga,
German East Africa, June 30th, 1901.

THE START FOR THE STAKES

GUY'S HOSPITAL ATHLETIC CLUB.—ANNUAL SPORTS.



GUY'S HOSPITAL ATHLETIC CLUB.—ANNUAL SPORTS
THE PARADE.—MR. HIGGENS.

PROCESSION ON PRIZE DAY.

Passim.

The Annual Report of the Guy's Hospital Ladies' Association has just been issued, and from it we learn that satisfactory progress has been made. We feel sure, however, that the present number of members (between four and five hundred) would be largely augmented had the work of the society been better known to Guy's men and their friends. The objects of the Association are to provide clothes for destitute patients, and to visit patients in our wards, to support one or more beds in the maternity ward, and to further any work in connection with the hospital which may commend itself to the committee. Beside the central organisation in town, there are many branches working for the same cause. The great need for clothes amongst a large class of our patients is known to all Guy's men, and surely a more worthy object could not be found for working parties than in trying to meet this, seeing that the distribution of gifts is exercised with due discretion. Any further particulars of the work of the Association will be gladly forwarded on application to the Secretary, Mrs. Shaw, 64, Harley Street.

For some time past there have been rumours that Dr. Shaw would resign his office as Dean, and now, much to the regret of all Guy's men, we find it officially announced. Every one will agree that Dr. Shaw was exactly fitted for the post. He possessed the first essential, diplomacy —and none knew better the truth of the old adage, "A kind answer turneth away wrath." Many are the disappointed office seekers, whom have been seen to enter the inner room with gloomy brows and with resolution writ large in their faces. After a few brief moments they emerged radianto, at peace with the selection committee, themselves, and the world at large. The office of Dean is a most difficult one to fill, and Dr. Shaw will retire with the thanks of the whole hospital for the able way in which he has filled it.

The Medical School of Guy's is certainly to be congratulated on having Dr. Fawcett to fill the post vacated by Dr. Shaw. As a teacher of physiology, Dr. Fawcett established himself as a popular favourite, and the close interest he has always taken in the Clubs' Union has served only to enhance his popularity. We feel sure that the broad-minded policy that has been invariably followed by Dr. Shaw with regard to lectures, will form a no less prominent item in the new Dean's programme, for it is a well-tested fact that the most flourishing school is that in which the spirit, rather than the letter of the law, is observed.

We have before us the Blue Book of the Clubs' Union, which has been considerably enlarged. The annual report is the part which will interest men most, and, unfortunately, from a financial point of view, it is not pleasing. The income of the club has fallen again this year, and although expenses have been cut down by £36, there is an actual loss of £37 on the year's working. The council has shifted the responsibility of dealing with the situation on to their successors.

On looking over the balance-sheet, there are several points which strike one. The Dental School, in spite of its increasing numbers, still only grants £15, against £100 by the Medical School. This surely might be increased, considering the fact that dental students become life members on payment of three annual subscriptions. A novel source of income appears on the receipts list—"Fine 5/-." No notice of a grant to the Association Football Club appears in the expenditure list. In the next issue of the Year Book, the council has decided to insert telephone numbers of members who will communicate them to the secretary. This, we are sure, will prove a great use to men who have settled down in practice.

The unsatisfactory state of our finances will have to be faced during the present year, as the causes for the fall in the income and increase in expenditure will remain as before. On the one hand, we have the exhaustion of the numbers of old Guy's men who become members on payment of a guinea, and against this, the increasing

repairs necessary for the care of the club property, and the higher rates, particularly at Honor Oak Park. As the expenditure cannot be further curtailed, it is clear that for the club to continue, the income must be augmented. Either the annual subscription must be raised, or perhaps, better still, as is done in most clubs, an entrance fee should be instituted.

ON Monday and Tuesday, the 22nd and 23rd July respectively, Mr. and Mrs. Cosmo Bonsor were "At Home" at Kingswood Warren, and, with that kindly hospitality which one has learned to associate with the house of Bonsor, they made their guests feel equally at home. The weather was of the brightest, and the magnificent grounds and gardens were looking their best, while the view over the moors from the church tower could not fail to attract even the least impressionable. After light refreshments in the marquee on the lawn had charmed the eye no less than the appetite, nurses and the mere male minority could wander through the garden, greenhouses, and stables, at their own sweet will. Tennis had its devotees, croquet amused the serious, and ping pong the more frivolous, while those young and active among us fell victims to the perilous attractions of see-saw and swing. No wonder the sound of the Matron's bell found us loth to tear ourselves away from such enjoyable surroundings, and the farewell cheers from the departing train, though pitched in a somewhat soprano key, must have assured Mr. and Mrs. Bonsor how much we appreciated their generous kindness.

DR. JAMES F. GOODHART delivered the opening address before the medical section of the British Association. Judging even by the condensed reports in the daily papers, the address seems to have been a very characteristic one, and to have been received with great enthusiasm by a crowded meeting.

ALTHOUGH Guy's were not successful in the United Hospitals' Sports, they ran Bart.'s very close in their efforts to win the shield. So close was the contest, in fact, that until the last race we led the eventual winners by a few points. Wadson repeated his last year's performance by winning the three short distance races, although in the 440 yards he was very hard pressed by Allen. This last race was the best of the meeting, and although Allen was ten yards behind coming into the straight, he was only a few inches behind Wadson when the latter broke the tape. Morgan won the broad jump for us, thus giving us four wins against Bart.'s five.

A NEW feature was introduced for the first time in the method of scoring; a first counting as ten points, and a second as three points. Although this has been criticised adversely, we feel that not only is it right, but that it is only a step in the right direction. If there were only two competing teams, the old system would prove quite satisfactory; but seeing that there is a number, it is better that places should count. The number of entries, like the number of spectators, has sadly fallen off of late years, and by encouraging every hospital to enter a team instead of a few of its best performers, it would do something to revive the flagging interest in the sports.

WHERE there are many applicants for a limited number of vacancies there is bound to be a certain amount of disappointment; but when a man, who has finished dressing, is kept waiting six months before being appointed extern, it is hardly to be wondered at if he feel that the plan upon which the selection is now made needs reconsideration. Whilst we recognise that merit ought to be the chief passport to the higher offices, other considerations should weigh in allotting compulsatory appointments. A solution to the difficulty would follow if it were recognised that there are more men than vacancies, and that accordingly some must either wait months, or gain their experience in midwifery elsewhere. Should they adopt the latter, in view of the existing circumstances, it ought not to be allowed to in any way imperil their future hospital career.

IN another column will be found Mr. P. T. Manson's account of the recurrent attack of

malaria that he recently had whilst studying pathology at Aberdeen. However unpleasant the experience may have been to him at the time, it certainly makes the experiment to which he submitted himself more complete. Any doubters who may have been inclined to reject the proof of last September's test, must now be convinced that, at least in this case, Dr. Manson has established the truth of the mosquito theory of malaria. Mr. Manson has just taken up the duties of acting House-Surgeon to the hospital at the Albert Docks, where we hope he will have plenty of good work in the special branch of medicine he is taking up.

The results of the Intermediate Examination for the London M.B., although not exactly startling, are, on the whole, very satisfactory. Three men obtained honours. A. M. Webber is especially to be congratulated on his first class in physiology, whilst four men in the first division for the entire examination hail from Guy's.

It is good news to report that several of our men, who have recently been ill, are all on the high road to recovery. Mandy is away at the seaside, and able to walk about. Hodgson has gone to Switzerland to find health; and Penny has appeared at the hospital much better for his rest. Gray is undergoing a period of forced seclusion at the South Western Hospital, having recently had an attack of scarlet fever.

From Vryheid, in the Transvaal Colony, a most interesting book has reached us. It is an English translation of Dutch official telegrams published during the war up to the time when the British troops occupied Vryheid, the translator being Mr. C. J. Davey, an old Guy's man. To any lover of romance the book will prove most interesting. The loss on the Boer side from these telegrams would appear to be very slight; mostly being "two burghers slightly wounded," and very occasionally, one killed.

Nursing News.

Matron's Office.

On July 22nd and 23rd, the Nursing Staff and others of Guy's Hospital were again invited by the Treasurer and Mrs. Cosmo Bonsor, to garden parties at their beautiful Surrey seat at Kingswood Warren. The guests numbering about 130 each day left London Bridge, South Eastern Railway, in a special train at ten minutes to two, Mr. Bonsor travelling down with them to Kingswood, when they at once proceeded to the terrace in front of the house, where their hostess was awaiting them. The weather was delightful, and after light refreshments had been partaken of, the guests wandered off at their own sweet will, some visited the church, farm, kennels, garden and stables, or explored the lovely woods and moors for heather and bracken, whilst others played lawn tennis, croquet, or "ping pong," or sat under the trees listening to the Blue Hungarian Band on the lawn.

At five o'clock a cold collation was served in a large marquee, after which the guests on the second day were given permission to pick the flowers in the garden, many of them being seen in the wards the next day. At half-past six the party took leave of their kind host and hostess, and started for the station, and as the train left Kingswood hearty cheers were given for Mr. and Mrs. Cosmo Bonsor. London was reached about half-past seven, everyone having spent a most enjoyable time.

We are pleased to announce that Sister Lazarus (Miss Arnold), Nurses Iszard, Vivian, Tilley, Spalding, and Lewin, have passed the examination in Massage of the Incorporated Society of Masseuses; Nurse Vivian obtaining first place in theory and fourth in practical, Nurse Iszard second place in both theory and practical, and Sister Lazarus second in practical and fourth in theory.

On July 23rd, Sister Gertrude (Miss Dewhurst), Sister of the Out-patient department, left the Hospital to take up an appointment in West Africa.

On July 15th, Probationer Hutton was appointed to succeed Nurse V. Wood as Head Nurse in Cornelius ward and on July 26th, Probationer Jackson was appointed Head Nurse in Queen.

On July 30th, Probationer Boyle was appointed to succeed Nurse Oldham as Head Nurse in the Isolation ward.

On August 1st, Probationer Weller was appointed Head Nurse in the Out-patient department.

Hospital "Blues" List.—By an unfortunate omission H. Bacon's name did not appear in list of Blues awarded for Association Football.

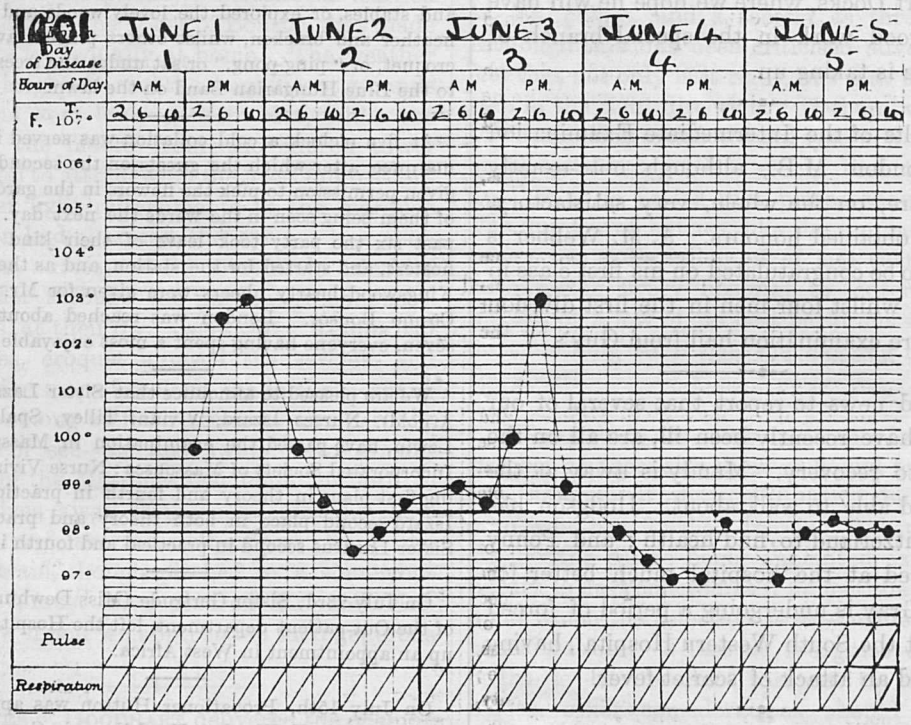
Experimental Malaria. Recurrence after Nine Months.

By P. THURBURN MANSON, M.B., Lond., Aberdeen.

IN the GUY'S HOSPITAL GAZETTE of Sept. 29th, 1900, I gave an account of a successful experiment of which I was the subject, on the production of malarial infection by mosquito bite. The sequel is of interest.

As a result of the bites of mosquitos fed in Rome on a case of benign tertian ague I developed a double tertian fever. The first symptoms appeared on September 13th, 1900, after an incubation period of between ten and sixteen days. The illness lasted from September 13th to September 17th, when the presence of the parasite having been fully confirmed, ten grains of quinine was given. This treatment was followed by five grains three times a day for a week, and a subsequent after treatment of five grains of quinine three times a day on Sundays for the following three months. There was no recurrence at that time of symptoms of malarial infection after the first dose of quinine, and I kept in normal health till May 30th, 1901, a period of nine months. I changed my abode from London to Aberdeen on April 15th, 1901, having resided in London since the original attack. On May 30th, 1901, I commenced, without obvious reasons, to have prodromal symptoms of illness; these were malaise and pain in the splenic region. Two days later, on June 1st, a definite malarial paroxysm occurred. The following are the notes of my case:—

June 1st.—For the previous two days I had been feeling out of sorts, and had experienced slight aching in the splenic region. At 2 p.m., on this date, I had a sensation of chilliness, accompanied with extreme lethargy and bone ache. The temperature was 99·8° F. At 5 p.m. I became extremely chilly, but no actual rigor occurred; temperature 101·2° F. Went to bed and at 6 p.m. began to feel warmer; temperature 102·6° F. At 9 p.m. profuse sweating set in; this gave considerable relief. At 10 p.m. the temperature was 103° F., and diaphoresis became more marked. The edge of the spleen was palpable, the splenic dulness increased, and the organ was both painful and tender. During the day there had been complete anorexia. Blood films were prepared, but were not examined till June 3rd.



June 2nd.—Woke at 4 a.m., having slept well and sweated profusely during the night. At 6 a.m. the temperature was 99·8° F.; by 10 a.m. it had fallen to 98·6° F.; during the rest of the day there was no pyrexia. Though feeling languid I was able to get about and ate fairly well.

June 3rd.—After a good night's rest I woke at 6 a.m. feeling quite well, with a temperature of 90° F. At 10 a.m. the temperature was 98·4° F. A small crop of herpes had developed at the angle of the mouth. I examined fresh films of blood drawn at 10 a.m. and found benign tertian parasites. At 12.30 p.m. shivering set it. Dr. Duncan,

Assistant to the Professor of Pathology, Aberdeen University, then stained and examined blood films, finding young and older forms of the benign tertian parasite. During the rest of the day the parasites were found on several occasions, both in fresh and stained specimens. At 3 p.m. the hot stage supervened, and at 6.30 p.m. the temperature being 103° F., pronounced diaphoresis occurred, affording marked relief. By 10 p.m. the paroxysm was over, the temperature having fallen to 99° F. and no inconvenience beyond slight pain in the splenic region remained. The spleen was still enlarged and slightly tender. During the day there was little desire for food. Quinine, grs. x. was taken. The films prepared on June 1st were stained and examined and were found to contain a considerable number of young and older forms of the benign tertian parasite.

June 4th.—During the day the temperature remained normal or subnormal. Spleen still palpable. The parasite was readily demonstrated in stained and fresh specimens during the whole day. A treatment of quinine grs. v. three times a day was adopted, and continued during the following week.

June 5th.—No recrudescence of fever. Parasites, though fewer, were still present. The spleen was no longer palpable nor tender.

June 12th.—During the week there was no recurrence of fever, and I am in normal health. Quinine, grs. v., has been taken three times daily. A further treatment of quinine, grs. v., three times a day on Sundays for the next three months will be adopted.

The temperature chart is appended.

From a consideration of the facts above recorded, and from the temperature chart, it will be seen that the case was one of simple benign tertian malaria, the original infection in September, 1900, having been of the double tertian type.

I am indebted to Professor Hamilton, Professor of Pathology, Aberdeen University, for confirming the presence of the parasite, both in fresh and stained blood films; to Dr. Duncan, Assistant to the Professor of Pathology, Aberdeen University, for preparing films, staining, and confirming the presence of the parasite; and to Mr. A. L. N. Maclean, of Aberdeen University, for preparing films. Dr. Manson, of the London School of Tropical Medicine, to whom stained specimens were sent, also confirmed the presence of the parasite of benign tertian malaria.

A similar article to the above has already appeared in the *British Medical Journal*.

In the notice of "Orion" Wines and Brandy, published in our last issue, we omitted to mention that samples and full information are at the disposal of the Medical Profession on application to Mr. E. Burney Young, Norfolk House, Laurence Pountney Hill, E.C., who represents the South Australian Government in this connection.

The Muscular and Nervous Mechanisms of the Digestive Tract.

A paper read before the Physiological Society by Mr. A. M. Webber.

Mr. Chairman and Gentlemen,—During the first year of our existence, before we cut our teeth, we were dependent for our existence upon liquid food. Under normal circumstances the child derives this from the breast of its mother; although Stuart relates a case of an Indian father, "who well understood the responsibilities of paternity and was so capable of fulfiling them, that he suckled his child for five months on the death of the mother."

In sucking, a special membranous projection of the gums of both jaws assists the lips in enclosing the nipple. A small space intervenes between the back part of the dorsum of the tongue and the soft palate. There a manometer records a negative pressure of 2 to 4 mm.; this is due to the weight of the jaw. During active sucking the genio-glossi and palato-glossi retract the tongue and hollow out its dorsal surface; these movements greatly enlarge this space and so increase the negative pressure. This causes the milk to flow through the nipple into the space.

In mastication the lower jaw is moved up and down so as to alternately separate and approximate the two rows of teeth; it has also a certain amount of movement from side to side and from front to back. The masseter, temporal and internal pterygoid muscles raise, and the digastric, with the aid of the mylo-hyoid, depress the lower jaw. The external pterygoids pull it forwards when both contract, but forward and to one side when only one contracts. The lower fibres of the temporal muscle retract the jaw. The buccinator and the orbiculoris oris muscles prevent the food from passing between the teeth and the cheeks and the lips. The tongue keeps the food in motion, works it up with the saliva, and finally gathers it into a bolus ready for deglutition. Although the act of mastication is voluntary, yet is it dependent on sense impressions. Bilateral paralysis, sensory or motor, of the tongue renders mastication almost impossible.

The act of deglutition transfers the bolus from the mouth to the stomach. It is customary to divide this act into three stages.

In the first stage the food is collected as a bolus on the dorsum of the tongue by the movements of this organ. After an interval of ·03 second a slight inspiratory movement takes place. This is succeeded by an elevation of the tongue which travels from apex to base, and so squeezes the bolus backwards past the isthmus faucium, completing the first stage of deglutition. This act is so far entirely voluntary.

Let us briefly describe the chief openings of the pharynx. The isthmus faucium is the name given to the communication between the mouth and the pharynx.

It is bounded above by the soft palate, below by the dorsum of the tongue, and on each side by two curved folds of mucous membrane, the pillars of the fauces. These latter spring from the base of the uvula and arch outwards and then downwards. The anterior pillar as it descends inclines forwards and ends on the side of the tongue enclosing the palato-glossus muscle, while the posterior inclines backwards, and encloses the palato-pharyngeus muscle. The soft palate hangs like a curtain over the isthmus faucium and divides the lower portion of the pharynx from the nasal part. The laryngeal opening, between the isthmus faucium, is an obliquely placed aperture, sloping from above downwards and backwards. In front it is bounded by the epiglottis, behind it is narrow and ends in the interval between the two arytenoid cartilages, while on either side stretch the aryteno-epiglottidean folds. Now to return to the second stage of deglutition, during which the bolus is conveyed through the pharynx. As soon as it passes the anterior pillar of the fauces, the bolus is in a region which is common to the functions of respiration and deglutition, and means have to be taken to prevent the food escaping into the various air passages as it is being conveyed to the œsophagus. The contraction of the mylo-hyoid presses the tongue backwards against the palate, and so propels the bolus through the back part of the pharynx. The stylo-glossi and palato-glossi assist this by pulling the tongue backwards, and at the same time, especially the latter pair, they serve to close the isthmus faucium and so prevent the return of food to the mouth. As soon as the bolus touches the soft palate, a simultaneous contraction of the levator palati and palato-pharyngeus muscle raise this structure. Also the contraction of the palato-pharyngei muscles approximate the posterior pillars of the fauces and raise the upper part of the pharynx. The raised soft palate comes in contact with the posterior wall of the pharynx, and fills up the opening between the approximated posterior pillars of the fauces. This both prevents food from entering the nasal cavities, and at the same time guides the bolus down the pharynx. We have now to consider how the larynx is shut off during this stage of deglutition. Almost immediately following the first contraction of the mylo-hyoid, the thyro-hyoid draws the whole larynx upwards, and at the same time the glottis and superior opening of the larynx are found to be closed. The closure of the glottis is not essential, as Langet has shown that swallowing can be performed without the passage of food into the windpipe, even when the cords are held apart by a pair of forceps introduced between them through a hole in the trachea. In the closure of the superior opening of the larynx, it was thought that the epiglottis was folded backwards over the opening. But Stuart showed that probably this did not occur, as extirpation of the epiglottis caused very little disturbance to the swallowing of the animal. What does occur, is that the arytenoid cartilages leave the posterior wall of the pharynx, and being rotated are moved inwards and forwards. This movement is effected by the external thyroid-artenoid, the artenoideus, the ary-epiglottidean and the lateral crico-arytenoid muscles. This approximation of the posterior boundary to the anterior is only rendered possible by the elevation of the whole larynx under the hyoid bone. Thus deglutition is rendered impossible by fixation of the larynx. As the arytenoids move forwards to close the laryngeal opening, they widen the opening leading from the pharynx to the œsophagus; so the bolus, which was being guided by the soft palate down the pharynx, is rapidly shot past the laryngeal opening into the region of the middle and inferior constrictors; here the third stage of deglutition commences.

In this the constrictors seize the bolus, and, by their successive contraction from above downwards, they thrust it downwards. When a small bolus or liquid food is swallowed, the movement of the back part of the tongue is sufficient to propel the bolus past the constrictors to the lower end of the œsophagus, or even through the cardiac orifice; in such cases there follows a contraction of the constrictors, and a peristaltic contraction of the œsophagus, which serves to expel any traces of food. But if the bolus is too large to be shot through the lax tube, a peristaltic contraction of the œsophagus carries it along. Now the walls of the œsophagus consist of striated muscle in the cervical region, of unstriated in the lower part of the tube, and of mixed fibres in the centre, corresponding to these differences in structure. Kronecker and Meltzer found that the duration and rapidity of propagation varied. In the cervical part the contraction wave tests 2·0—2·5 seconds, in the second from six to seven seconds, while the third tested from nine to ten seconds. If a bolus is carried down by these peristaltic contractions, it reaches the stomach six seconds after leaving the mouth.

It is found that if a second swallowing movement is performed, the peristaltic nervous changes, which originate the pharyngeal movements of the second act, causes a reflex inhibition of the œsophagus contraction belonging to the first act; this allows the tube to remain perfectly lax until the movements of deglutition have come to an end, when a peristaltic movement of the œsophagus occurs, which sweeps away all the remaining particles of food. The cardiac sphincter, normally in a state of tonic contraction, shares in this inhibition. When one act only occurs, two distinct sounds can be heard on auscultating; one due to the passage of the bolus down the tube occurring immediately after it leaves the mouth, and the other occurring about six seconds later and due to the peristaltic contraction reaching the cardiac orifice.

The whole of deglutition is a reflex act, started by touching the fauces, or forcing saliva into the fauces. The afferent paths travel by the second division of the fifth, the ninth, and the pharyngeal branches of the tenth nerves. A centre for deglutition has been located in the medulla, lying near to and connected with the respiratory centre. The afferent impulses leave the centre by the twelfth to the muscles of the tongue, and the fifth to the

mylo-hyoid, by the ninth, the pharyngeal branch of the tenth and eleventh, to the muscles of the pharynx, and by the recurrent laryngeals, the pulmonary and œsophageal plexuses of the vagi to the œsophagus. The peristaltic contraction of the œsophagus is a reflex act, and can only be started by a stimulus applied to the palate and fauces. If the vagi be cut, the peristaltic wave is abolished Section or ligature of the tube is powerless to arrest the wave, provided that the nerve is intact. Very important is the fact, that deglutition inhibits respiration for five to six seconds; this inhibition is a reflex act carried out through the intermediation of the glossi-pharyngeal nerve.

The food has now reached the stomach. Here movements take place which mix the food with the gastric juice and also propel the semi-digested chyme towards the duodenum, The stomach consists of three muscular coats, an outer longitudinal, a middle circular, and an inner incomplete layer of oblique fibres. A special thickening of the circular fibres in the pyloric portion of the stomach is called the "transverse band." In an empty state the stomach is contracted, but with the ingress of food it gradually relaxes as distention increases. Soon after the arrival of food in the stomach, irregular contractions of the walls occur; these soon become more active. According to Beaumont's observations on Alexis St. Martin, these contractions tend to cause the gastric contents to move from the cardia along the greater curvature to the pylorus, and then back along the lesser curvature. This thoroughly mixes the food and the gastric juice. Cannon investigated this subject, after the administration of bismuth, by means of the Röntgen rays. Movements of the stomach were thus outlined on the screen. He describes the movements as occurring a few minutes after the arrival of the food, as slight constrictions first appearing near the middle of the stomach. These travel towards the pylorus and become stronger in character as digestion proceeds. Each movement lasts thirty seconds and follows the preceding one after an interval of ten seconds, so that there are several waves at the same moment. During this time the fundus is acting as a reservoir for the food, and gradually contracts on its contents squeezing the food into the pylorus. The pylorus only opens at regular intervals, a hard morsel of food at once reflexly closing the opening. This opening of the pylorus is due partly to slight inhibition of the circular sphincter, and partly to the contraction of the longitudinal fibres. Although at first only liquid parts of the food are allowed to pass, as digestion proceeds even solid portions are allowed through.

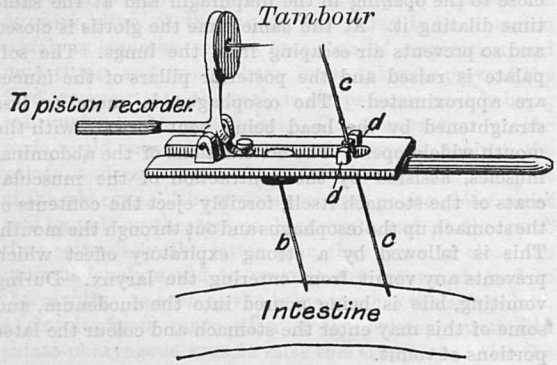
Practically nothing is known as to the causation of the gastric movements, as they occur perfectly well in the stomach cut out of the body. It is thought that the contraction wave is originated in the muscular tissue of the organ itself; also that the stimulus is caused by the acidity of the gastric contents, which become more acid as digestion proceeds. Most observers agree that the vagus is the motor nerve of the stomach, but there is a diversity of opinion, as to the functions of the splanchnics. The movements of the stomach are reflexly inhibited by stimulating the central end of the vagus or by pain or anger.

Vomiting is usually excited by direct contact of irritants with the gastric mucus membrane, but it may be caused reflexly from many different sources. The patient usually has a nauseous feeling and swallows large quantities of saliva. This latter carries with it a quantity of air, which distends the stomach. Retching then occurs. In retching the glottis is closed, and several deep inspirations are taken. Air cannot get into the lungs and so it fills the pharynx and œsophagus. Suddenly a violent expiratory contraction of the abdominal muscles takes place, accompanied by a contraction of the diaphragm. This compresses the stomach between the diaphragm and the abdominal muscles. Just before this, the longitudinal fibres of the lower end of the œsophagus contract bringing the cardiac orifice close to the opening in the diaphragm and at the same time dilating it. At the same time the glottis is closed and so prevents air escaping from the lungs. The soft palate is raised and the posterior pillars of the fauces are approximated. The œsophagus is more or less straightened by the head being bent forward with the mouth widely open. The contractions of the abdominal muscles, assisted by the contraction of the muscular coats of the stomach itself, forcibly eject the contents of the stomach up the œsophagus and out through the mouth. This is followed by a strong expiratory effect which prevents any vomit from entering the larynx. During vomiting, bile is being poured into the duodenum, and some of this may enter the stomach and colour the later portions of vomit.

Magendie showed that vomiting could take place on the injection of tartar emetic, even after the stomach had been replaced by a bladder; he said, therefore, that the contraction of the abdominal wall was chief factor in the act. But it has since been shown that this is only true if the bladder be tied to the lower end of the œsophagus, vomiting being impossible if the cardiac orifice be intact. So we see that active dilatation of the cardiac orifice and compression of the stomach are both necessary factors. After paralyses of the abdominal muscles above, the diaphragm can still produce vomiting; but the intrinsic muscles of the stomach are of themselves quite unable to produce more than an escape of gas, or small quantities of food or fluid. A vomiting centre has been located in the medulla near the respiratory centre. Emetics may excite vomiting either reflexly from the stomach, *e.g.*, mustard and water, or directly from the centre, *e.g.*, apomorphin, or in both ways, as in the case of tartar emetic.

The investigation of the intestinal movements is beset with many difficulties, that varying results have been obtained by the different authorities. The reason of this diversity of opinion is, because different animals give what appear to be different results, although in the main these results are identical. Again, each segment of the intestine is subject to augmentor and inhibitory

influences, such as pain, drugs, anæsthetics and abnormal surroundings. So, to avoid the disturbing influences of drying and cooling on the intestines, it is best to open the abdomen under a bath of warm normal saline. Most of us know that the muscular wall of the small intestine consists of two layers of unstriated muscular fibres, separated by a thin layer of connective tissue; here we find a rich plexus of ganglion cells and non-medullated nerve fibres known as Auerbach's plexus. From this, nerve-fibres pass to the individual fibres of the two layers. These two layers are so closely bound together as to make it difficult to decide by inspection whether a change is caused by a relaxation of one coat or by a contraction of the other. But we can graphically record the contractions of the two coats independently, when it is found that they nearly always contract simultaneously. The contraction of either coat may be recorded by means of the enterograph. This consists



b is fixed.
c revolves around an axis drawn through *d*.
Starling's Enterograph.

essentially of two needles *b* and *c* fixed to a slot. A thread is passed through the coat, whose contractions are to be registered, and this thread is also passed through the eyes in the free ends of both needles; *b* is firmly fixed, while *c* revolves round an axis at the slot; to the other end of *c* a thread passes to a recording tambour. When the muscular coat contracts *c* is drawn towards *b*; and this draws out the membrane of the recording tambour. To record contractions of the circular coat alone, an indiarubber bulla, slightly distended with air or water, is introduced into the interior of the intestine through an opening in the free border; this bulla is connected with a recording tambour.

On examining the intestines their appearance differs with the kind of animal, and also with the state of the animal. In a fasting animal the intestines are anæmic, motionless and tonically contracted, whereas after food they are hyperæmic, relaxed and have swaying movements. It is found by recording these movements, by the above means, that in most cases the wall is undergoing a series of rhythmical contractions, in which both coats act together. These are repeated ten to thirteen times a minute, each contraction lasting from five and a half to six seconds, and being propagated downwards at the rate of 2 to 5 c.m. per second. This intestinal rhythm is independent of external conditions although the amplitude of the contractions may be augmented or diminished by external circumstances. This increased height of contraction may be evoked by intestinal distension, or by better arterial supply. These movements may originate anywhere in the gut, and are as well marked in isolated loops as in those which retain their functional continuity with the rest of the intestine. But after paralysis of Auerback's plexus by nicotin or cocain these waves travel indifferently in either direction. They therefore originate in the muscle fibres, being transmitted from fibre to fibre, and so they are said to be "myogenic contractions." Their action is to thoroughly mix the contents of the intestine and to bring them into intimate contact with the mucous membrane.

But we may observe another movement in the small intestine. This is the true peristaltic movement and may be studied by introducing a bolus of cotton-wool and vaseline into the intestine at some point. The movements of the muscular coats may be recorded by the enterograph. It is found that the segment of the intestine immediately above the bolus enters into a strong tonic contraction, while the segment below the bolus is found to be inhibited and relaxed. The contraction above and relaxation below tends to move the bolus onwards. If the gut is less irritable the contraction and inhibition are but slightly marked, and the bolus only moves slowly downwards. The movement may be increased by pinching the gut at the point where the bolus may happen to be, each pinch being followed by a temporary inhibition of the gut below and an augmentation of the contraction above. If we record the contractions of the intestine at any point, it will be found that a pinch applied from one to twelve inches above the recorded spot gives an instant inhibition of the rhythmic contractions, whereas a pinch applied from half to three inches below produces, after a varying latent period, an augmentation of the contraction, Injection of nicotin or local application of cocain paralyse the nerve centres, but leave the muscle fibres intact. Although the rythmic contractions are better marked, yet the true peristaltic movement has disappeared and the intestine is powerless to move the bolus onwards. True peristalsis is moreover propagated in only one direction. If a segment of the intestine be divided and then resected, the functions of the bowel will be normally carried out. But if the resected loop be turned round, so that the end nearer the stomach is now nearer the anus, and vice versa, it will be found that the bolus will be unable to pass along and so the animal dies from intestinal obstruction.

Let us consider the conditions of intestinal activity. In a recently killed rabbit the movements are found to be very active, and this change is usually brought about by cessation of the circulation. But on investigating the effect of anæmia on the enervated intestine, Bayliss and Starling found that the activity was really diminished. They therefore attribute the post-mortem activity as due

to paralysis of the nerve centres with the consequent cutting off of the inhibitory impulses, and perhaps also to a distinct motor effect due to the central stimulation of the vagi from asphyxia.

The intestines are enervated from two sources; the two vagi and from the sympathetic, through the great and small splanchnics from the first three lumbar ganglia. With regard to the action of the vagus very discordant results have been obtained. This is chiefly due to disturbing factors, such as anæsthetic and exposure and handling of the intestines. By dividing both splanchnics and avoiding any lesion above the observed spot, Starling found that stimulation of the vagus in the neck has a twofold effect: (1) An inhibition with a very short latent period. (2) An augmentation of the rhythmic contractions, which developes after ten to thirty seconds, and lasts for some time. The vagus effect may come in at any point, and is not abolished by ligaturing the duodenum, showing that the vagus does not run down from the duodenum between the two coats. The effects are better marked where the intestine is already excited by the presence of a bolus. Later work by Bayliss and Starling shows that the preliminary inhibition is wanting in the rabbit, but is well marked in the dog and cat. They are inclined to think that this preliminary inhibition is due to a state of excitation occurring higher up in the alimentary canal, but are not yet decided on this point. Many observers assign a motor influence to the splanchnics, some think that the splanchnics are motor for the longitudinal, but inhibitory for the circular coat. Bayliss and Starling found that the splanchnics were purely inhibitory to both muscular coats of the small intestine. By means of two enterographs placed at right angles to each other, they found that stimulation of the splanchnics caused inhibition of both coats. This was not due to coincident vascular effects of splanchnic excitation, as it was obtained by stimulating the mesenteric nerves after cutting the intestines out of the body. This inhibition affects all parts of the small intestine alike, and abolishes for the time both myogenic and peristaltic contractions.

In the main, Bayliss and Starling find that the results obtained by them from dogs are applicable to rabbits and cats. In the rabbit the rhythmic movements are very active. In the peristaltic movements contraction above the bolus is more pronounced than inhibition below, which is limited both in time and extent.

The large intestine of a dog is found to be moderately contracted. Peristaltic contractions starting from above travel to about the middle of this part of the gut, and if several boluses be inserted, they tend to accumulate at this spot. In an active colon this accumulation excites a peristaltic wave which empties the gut. The rhythmic contractions of the large intestine differ from those of the small intestine. They are much longer and of less frequency, and last from ten to forty seconds. Superimposed on these, smaller contractions may be seen. The origin of these contractions has not yet been worked out. The descending inhibition and ascending excitation forming each peristaltic wave are practically similar to that of the small intestine.

Langley and Anderson have shown that the colon receives its enervation from two sources, from the upper lumbar nerve roots through the sympathetic chain and inferior mesenteric ganglia, and from the sacral nerve roots by way of the pelvic visceral nerves. The sympathetic supply has a purely inhibitory effect on both muscular coats of the bowel. The pelvic visceral nerve is motor to both coats, having in the dog a preliminary inhibition as in the small intestine.

The undigestible products are carried down into the sigmoid flexure by the peristaltic contraction described above. These are too weak to drive the fæces into the rectum, which is ordinarily empty. The fæces are got rid of periodically by the process of defæcation.

Defæcation is normally started by a voluntary act, although it occurs in a dog whose dorsal cord has been divided. The glottis being closed, a forcible expiratory contraction of the abdominal muscles takes place. The perineal muscles being relaxed at the same time, the lower part of the rectum is straightened, and a portion of the contents of the sigmoid flexure is forced down into the lower part of the rectum. The presence of a foreign body in that part of the rectum irritates the mucous membrane and excites reflexly the rest of the act. Strong peristaltic contractions take place along the whole of the descending colon, sigmoid flexure and rectum, while both sphincters are relaxed, thus forcing out the contents of the bowel. The last section of the rectum at the close of the act is emptied by a forcible contraction of the levator ani and the other perineal muscles. This contraction also serves to restore the mucous membrane, which had been everted by the contraction of the recto-coccygeal muscle.

A centre in the lumbar cord presides over the carrying out of this reflex act, and the tonic contraction of the muscles is lost if the centre be destroyed; this causes the animal to unconsciously pass its motions. This part of the gut receives nerves from two sources, an upper supply from the lower lumbar nerves, and a lower from the lower sacral nerves. The upper nerves have their cell station in the inferior mesenteric ganglia, and then pass by the hypogastric nerves to the rectum, while the lower set run in the nervi eregents and have their cells in the rectum.

The usual result of excitation of the sacral nerves is a strong contraction of the recto-coccygeal muscle and of the longitudinal fibres of the rectum, accompanied by a marked relaxation and dilatation of the internal sphincters; strong peristaltic movements are also set up in the lower part of the bowel, so that stimulation of these nerves gives rise to defæcation. Fellner believes that, while the sacral nerves are motor for the longitudinal muscles, but inhibitory for the circular, on the other hand the hypogastric nerves are motor for the circular, but inhibitory for the longitudinal muscles. Langley and Anderson assert that this is not the case as far as rabbits and cats are concerned. On the whole

the results as to the action of both sets of nerves are very discordant. Application of warmth to the perineal region causes reflex relaxation of the sphincters, while cold increases their tonic contraction.

Appointments.

MEDICAL SCHOOL APPOINTMENTS.

The following appointments have been made by the Medical Council and approved by the House Committee :—

Assistant Demonstrators of Anatomy.—Messrs. J. Cook and E. C. Peers.

Assistant Demonstrators of Chemistry.—Messrs. T. H. Barton and F. M. Longson.

Assistant Demonstrator of Biology. — Mr. E. M. Harrison.

Prosectors (1st half).—Messrs. E. H. Adams, R. W. Allen, G. Hamilton, A. G. Jones, A. B. O'Brien, W. P. Purdom; (2nd half) E. Bellingham Smith, R. J. Bentley, W. N. May, H. V. Mitchell, E. W. Routley, H. A. Watney.

CIVIL.

Percival, G. H., M.B., has been re-appointed Medical Officer of Health of Northampton Rural Sanitary District.

Sharp, H. C., M.B., B.C. Cantab., has been reappointed Medical Officer of Health of Truro.

Watson, Cecil F., L.R.C.P. Lond., M.R.C.S., has been appointed by the Secretary of State for the Colonies, Medical Officer, Northern Nigeria, West Africa.

MILITARY.

E. T. Jensen, M.B., has been appointed a Civil Surgeon and posted to the Herbert Hospital, Woolwich, for duty.

Sport.

United Hospitals' Sports.

Held at the L.A.C. ground, Stamford Bridge, on July 17th. Results :—

100 Yards Challenge Cup.—S. Wadson, Guy's, 1; E. Morgan, Guy's, 2. A good race, Morgan only being beaten by inches. Time, 10⅘sec.

Half-Mile Challenge Cup.—H. E. Graham, St. Bart.'s, 1; R. W. Allen, Guy's, 2. Graham always had the race in hand. Allen was an easy second. Time, 2min. 8⅖sec.

Putting the Shot.—D. M. Stone, St. Bart.'s, 1; R. J. C. Thompson, St. Thomas's. 35ft.

High Jump.—J. E. Lascelles, St. Mary's, 1; J. H. Thomas, London, 2. Lascelles was an easy first, but failed to beat the record he established last year. 5ft 8in.

220 Yards Challenge Cup.—S. P. Wadson, Guy's, 1; T. St. C. Smith, St. George's, 2. Time, 23⅕sec. Wadson soon showed in front and won easily. Morgan was well up, but was passed in the last few yards.

One Mile Challenge Cup.—H. E. Graham, St. Bart.'s, 1; G. A. Simms, St. Thomas's, 2. Graham made all the running himself and won anyhow. Time, 4min 36⅗sec.

Throwing the Hammer.—W. M. Fletcher, St. Bart.'s, 1; G. M. Levick, St. Bart.'s, 2. An easy win for Fletcher, who beat Hospital record with a fine throw of 110ft 3in.

440 Yards Challenge Cup.—S. P. Wadson, Guy's, 1; R. W. Allen, Guy's, 2. The best race of the day. Wadson was always in front, but Allen who was fourth when entering the straight was only beaten by less than a foot. Time, 54sec.

Long Jump.—E. Morgan, Guy's, 1; J. H. Thomas, London, 2. 20ft 9in

120 Yards Hurdles.—W. T. Gibson, London, 1; W. M. Fletcher, St. Bart.'s. A really good race; Fletcher was first over the last hurdle, but was beaten in the run in.

Three-Mile Challenge Cup.—S. G. Gibb, St. Bart.'s, 1; A. C. Birt, St. Thomas's, 2. There were five starters, but at the end of first mile only two were left. Birt held Gibb till last lap, when the latter came away and won by 100 yards.

1st	St. Bart.'s ...	...	56 points.
2nd	Guy's ...	...	49 „
3rd	London	...	13 „

We omitted to mention in our Review of the fourth edition of Sewill's Dental Surgery, which appeared in No. 348, 20th July last, that the book is published by Messrs. Bailliére, Tindall & Cox, of 8, Henrietta Street, W.C., and the price 10s. 6d.—[Ed., G.H.G.]

Birth.

EDWARDS.—On July 29th, at 34, Peckham Road, the wife of Francis H. Edwards, M.D., M.R.C.P., of a son.

Marriage.

DAWSON—OBREE.—On July 25th, at St. Paul's Church, Southampton, by the Rev. O. R. Dawson, M.A. Cantab., Senior Curate of Ashford, Kent (brother of the bridegroom), assisted by the Rev. S. Lidbetter, Vicar, William James Oliver Dawson, L.D.S., Royal College of Surgeons, England, of Portarlington, College Place, Southampton, second son of O. R. Dawson, Esq., The Southerns, Archer's Road, Southampton, to Edith Lilian, elder daughter of R. A. Obree, Esq., Bedford House, Bedford Place, Southampton.

Death.

MUNCASTER.—On July 19th, at the Mount, Halifax, Yorkshire, James Hannay Muncaster, B.A. Cantab., M.B. Lond.

Ed.—D. G. G.

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Calendar of Coming Events.

August, 1901.

Mon. 2.—Messrs. Lucas and Lane's take-in; Drs., G. T. Wrench and C. H. Robertson; Cl., M. A. Collins.
Library re-opens.

Tues. 5.—Messrs. Golding-Bird and Dunn's take-in; Drs., A. W. Iredell and J. D. Pearson; Cl., D. G. Greenfield.

Sat. 7.—October Appointment List closed.

Mon. 9.—First M.B. Durham Examination begins.
Revision Classes for L.D.S. Eng. begin.

Thur. 12.—Messrs. Jacobson and Fripp's take-in; Drs., G. W. Smith and S. L. Pallant; Cl., A. C. H. Gray.

Sat. 14.—Last day for sending in Fees and Certificates for Camb. D.P.H. Exam.

Guy's Hospital Gazette,

AUGUST 31, 1901.

Are not many Patients supposed to be suffering from Gastric Ulcer really suffering from some other disease?

CLINICAL LECTURE BY DR. HALE WHITE.

July 3rd, 1901.

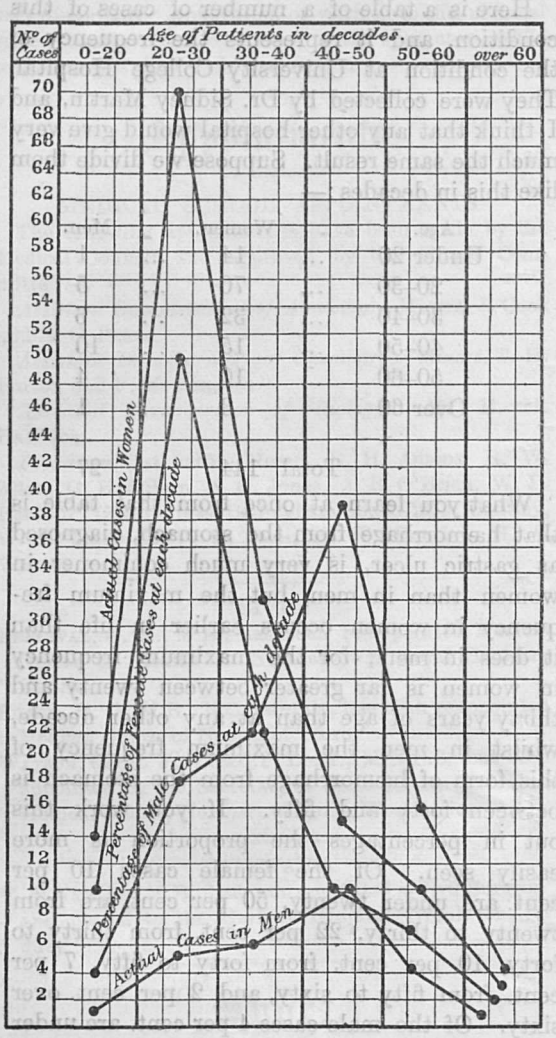
Gentlemen,—This afternoon I want to go over with you a few points about hæmorrhages from the stomach, and the first thing for you to notice about it is that hæmorrhage, if it is from the stomach, is very much commoner in women than in men, and the condition which is commonly diagnosed as gastric ulcer at the bedside is very much commoner in women than in men.

Here is a table of a number of cases of this condition, and it represents the frequency of the condition at University College Hospital. They were collected by Dr. Sidney Martin, and I think that any other hospital would give very much the same result. Suppose we divide them like this in decades:—

Age.	Women.	Men.
Under 20	14	1
20–30	70	5
30–40	32	6
40–50	15	10
50–60	10	4
Over 60	3	1
Total	144	27

What you learn at once from that table is that hæmorrhage from the stomach, diagnosed as gastric ulcer, is very much commoner in women than in men, but the maximum frequency in women occurs earlier in life than it does in men; for the maximum frequency in women is far greater between twenty and thirty years of age than at any other decade, whilst in men the maximum frequency of this form of hæmorrhage from the stomach is between forty and fifty. If you work this out in percentages the proportion is more easily seen. Of the female cases 10 per cent. are under twenty, 50 per cent. are from twenty to thirty, 22 per cent. from thirty to forty, 10 per cent. from forty to fifty, 7 per cent. from fifty to sixty, and 2 per cent. over sixty. Of the male cases 4 per cent. are under twenty, 18 per cent. between twenty and thirty, 22 per cent. from thirty to forty, 39 per cent. from forty to fifty, 15 per cent from fifty to sixty, and 4 per cent. over sixty. So there is a far higher percentage in the male cases from forty to fifty, and a far higher percentage in the female cases from twenty to thirty; and the figures themselves show a greater number of cases in the younger age in the female sex.

Well, now, the greater frequency of hæmorrhage, due to what is commonly called gastric ulcer at the bedside, is so striking at the ages, in women, of from 20 to 30, that it greatly influences the statistics of gastric hæmorrhage from all causes. Of course, a great many of



Curves drawn from table given by Sidney Martin of 144 female and 27 male cases diagnosed clinically as gastric ulcer.

Showing the actual number of male and female cases in each decade, and the percentage of the male and female cases respectively in each decade.

It is well seen that the actual number of female cases is greater than of the male, but that far more female cases occur between twenty to thirty than in any other decade, while the heaviest decade for male cases is forty to fifty.

such cases are not examples of ulcer; some are instances of heart disease, some cancer, and so forth. But, nevertheless, the following figures, which are from Guy's, will show you very well the influence of the form of gastric hæmorrhage we are discussing. Out of 118 cases of hæmatemesis relieved or cured in Guy's, from 1870 to 1890, 36, or 30 per cent., were under 30, and of these 36, 27 were women and 9 were men. That shows that when you take the cases of all varieties of gastric bleeding under 30, the greater number by far occur in women. But of the 118 cases, 82 were over 30 years old, and 51 cases were among men and 31 among women. There, you see, the excess of the women is lost—the excess is rather on the side of the men. So that the excess of what is commonly called gastric ulcer in women is so great at that particular time of life, namely, under 30, that if you lump together all the cases of hæmatemesis, the excess of them due to so-called gastric ulcer is enough to make an excess among women under 30 in the total number of cases of hæmatemesis.

The next point that I want to draw your attention to is a very important fact. I have here statistics of another collection made by Dr. Goodall of 155 cases of severe hæmatemesis in Guy's Hospital, and 66 of them were considered to be due to gastric ulcer, and of the 66, 29 were patients under 30, and only 2 of these were men. Those figures show just the same result as I gave you before, namely, a great excess in women under 30. You might say, "That is only what I should expect, because I know gastric ulcer to be much more common in women than in men." But notice the following figures:—

Dr. Habershon collected the cases here at Guy's, and he found that the number of fatal cases of gastric ulcer during twenty-years were 37 men and 27 women. The cases fatal from hæmorrhage were 19 men and 4 women. There you have, so far as the post-mortem record goes, a great excess in favour of the men. Well then, during forty years at Guy's, I find there were 42 cases of perforated gastric ulcer, 20 in men and 22 in women. Dr. Norman Moore collected the cases at St. Bartholomew's, and he found that during thirteen years the fatal cases of gastric ulcer were 11 men and 3 women. I added together a number of fatal cases published

in various places, and found that the numbers were 34 men and 22 women.

Then, again, notice a collection of cases which Dr. Goodall made when he was registrar here, and which he made at the request of Dr. Hood, who was interested in the subject, and published a paper on it. For instance, Dr. Goodall took the cases in which hæmatemesis was not immediately fatal, but the patient died later, and there were 18 such cases, and of these three were instances of gastric ulcer in males, and not a single one of the female cases was an instance of gastric ulcer. Indeed, during a long period—I forget the exact number of years—he did not find a single fatal case of hæmorrhage from a gastric ulcer occurring in the hospital in a young woman. So that, as far as post-mortem experience goes, there is no excess of cases of gastric ulcer among women; indeed, it is usually that the excess of cases is much larger in men than in women. This is the first great fact.

The next great fact is that gastric ulcers—as I have already proved to you—if we judge by our clinical experience, are much more common in women than in men. And it has always seemed to me that because of these two important facts, one of two conclusions must follow. Either gastric ulcer must be much more favourable as regards its prognosis in women than in men, or gastric ulcer must frequently be diagnosed at the bedside in young women when it did not exist. You have often heard me urge this, for many years, at the bedside, and I feel certain you will agree with me that one of these two conclusions must follow. These facts also struck Dr. Hood, and he some nine years ago published this paper that I have here, and from which many of the figures I have given you are taken. Although I taught what I am now urging before Dr. Hood's paper appeared, I have not lectured on the subject, because we have not till recently had the facts which surgery has given us, and to which I will allude presently.

Of these two hypotheses—one, that so-called gastric ulcer has a much better outlook in women than in men; and the other, that many cases of what is commonly called gastric ulcer in women are not cases of gastric ulcer—the latter seems to me the more likely, and the reasons are these. If you allow that many cases diagnosed as gastric ulcer in women are not so, we relieve ourselves from the onus of explaining why it is that so-called gastric ulcer is much more common in women than in men. Also we relieve ourselves of the onus of explaining the difficult fact that its maximum of frequency occurs much earlier in women than in men. We further relieve ourselves of the difficulty of explaining the very obscure fact that it is much more fatal in men than in women. We get over all these difficulties if we assume that many cases diagnosed as gastric ulcer in women are not really instances of gastric ulcer. Therefore I have often suggested to you at the bedside that there is a disease—not ulceration—met with chiefly, or perhaps only, in women usually between twenty and thirty or forty years old, and that its chief symptoms are gastric pain, nausea, sickness, and hæmatemesis. I have also, for reasons which I have just given, pointed out to you that probably in these young women those symptoms do not usually depend upon an ulceration. If there is any ulcer it is probably quite superficial and merely secondary to hæmorrhage. You can hardly imagine the blood bursting through the mucous membrane without causing just a little superficial epithelial ulceration.

Let us turn now to the possibility of separating these cases from genuine cases of gastric ulcer. In the first place, I admit that a diagnosis between the two conditions is often very difficult, but I would suggest that you should, during their life, look for the following points as helping you to a correct conclusion. In the first place, these women may and do show, serious gastric symptoms for many years, five, ten or fifteen, and yet they do not show any great wasting such as you see sometimes in a case of genuine gastric ulcer. Another point is that they nearly always have intervals of good health, while people with genuine gastric ulcer do not, I think, nearly so often get intervals of good health. A third very important point which I am sure from your experience you will bear me out in stating, is that these cases of hæmatemesis in young women are very frequently

associated with chlorosis. There is no such special association between chlorosis and genuine gastric ulcer, for genuine gastric ulcer occurs in men in whom chlorosis is unknown.

Another thing obviously that will help you in your diagnosis is the fact that this condition which I have tried to separate from genuine gastric ulcer, occurs with women from twenty to forty years of age, and the cases are, I imagine, nearly always, if not quite always, among the female sex.

Then there is this very important point, that this condition produces none of the organic effects of ulceration of the stomach. For instance, an ulcer may cicatrise and produce chronic pain or gastric dilatation, or may perforate and lead to fatal peritonitis, or an ulcer may form a subdiaphragmatic abscess, or it may become adherent to neighbouring organs and adhesions take place. But if there is a condition, as I am trying to prove to you, which gives the symptoms that I have just enumerated and is not due to ulceration of the stomach, it is quite clear that none of these mechanical results of ulceration will be present, so that if any of them are present you will be justified in diagnosing the case as one of genuine ulcer.

Even up to now you might perhaps be justified in saying, "This is rather fine-drawn. What does it matter even if you do diagnose it?" There is a general interest which we all have in the trying to be right, but apart from that I think it is important to remember that the prognosis is entirely different in the two classes of cases. The patient with gastric ulcer has always before him or her many serious things that may happen. The ulcer may perforate, it may form adhesions, the patients may get pyloric stenosis, or a subdiaphragmatic abscess. So that the prognosis in genuine gastric ulcer can hardly be said to be very good. I have enumerated to you many fatal cases of gastric ulcer already to-day, but the prognosis, I take it, of the condition characterised by pain, nausea, sickness, and hæmatemesis occurring in young women, but not due to gastric ulcer, is good. In the first place, the patient is not liable to perforation, she is not liable to adhesions or pyloric stenosis or subdiaphragmatic abscess. "But," you say, "she is surely liable to hæmorrhage." Well, the fact is that these people very rarely die of hæmorrhage. I shall be able to quote you one or two cases in which it has been fatal, but everybody is agreed about the rarity of death in these cases from hæmorrhage. Taking my own experience, I have been at the hospital now for a good many years, and although these cases of gastric hæmorrhage in young women are very common, I have never seen one fatal. So that if you can separate this disease which is not ulceration, as I am trying to help you to do, from genuine gastric ulcer, you will be able to say in a young woman between twenty and thirty, "You are not suffering from an ulcer; you are suffering from a disease which is associated with chlorosis; but that I know very little about; but I do know this, that the prognosis is good, for although you might conceivably die from hæmorrhage, such an event is infinitely rare, whilst if you had genuine ulcer you might possibly get pyloric stenosis, and other serious mechanical complications." Remember, in spite of very severe hæmorrhage, these cases do not bleed to death. But they are, unfortunately—and that you must point out to them—liable to relapse. At the same time you can always say to them, although they may relapse, "You will gradually grow out of it, and the relapses will probably ultimately become less and less important."

(*To be continued.*)

Novelties.

"SHREDDED WHEAT."

This food-stuff has been tried during the past few months in the medical wards at Guy's. It is made by a patent process, which leaves it in a fine state of division. By several applications of heat the starch is largely converted into soluble carbohydrates.

This preparation can be used in a variety of ways and forms an excellent basis for many dishes. It is easily digested, even by children, and is a good change from the ordinary farinaceous food.

Further particulars may be obtained from the Cereal Machine Co., 6 and 8, Eastcheap, E.C.

In the Medical Wards.

CASE UNDER DR. PERRY.

PULMONARY STENOSIS.

There is at present in Mary ward an interesting case of the above lesion.

E. B., æt. 61 years, was admitted for general pain and weakness. Patient is a married woman and has had two children and three miscarriages. Her father died of heart disease, and she has a brother and sister both alive and healthy. As a child, patient has always been strong and active, never being troubled with cyanosis or shortness of breath; for the last few years she has not been so active, since the least exertion produces cyanosis and dyspnœa. At the age of fourteen patient had rheumatic fever, from which she states she recovered completely. Of late, she has had several attacks of influenza and suffers from bronchitis and winter cough, and is troubled with occasional bleeding from the rectum. She dates all her present trouble from a "fit" which occurred three years ago, in which she became cyanosed, cold, and convulsed, and finally lost consciousness for nine hours. On recovery she was detained for six months in an asylum. She has no definite recollections of this period. Since this she has been considerably troubled with her eyes, and has suffered from loss of memory, while the fingers and toes have become clubbed and numbed.

Condition on admission.—Patient is a well-nourished woman, the face is dusky, with the lips and ears somewhat cyanosed, the eyes are small and sunken, surrounded by dark patches. Patient's fingers and toes are extremely clubbed and cyanosed, the nails are curved and bluish in colour, and the extremities are cold; there is no swelling of the legs.

Circulatory system.—The apex beat can be felt and sometimes seen in the fifth space somewhat diffused, and internal to the nipple line. No thrills can be felt. The cardiac dulness is limited to the fourth and fifth left spaces only. On auscultation, the heart sounds appear somewhat muffled; at the apex a very musical whistling systolic bruit can be heard with a maximum intensity in the fifth left space. This is traceable outwards to the posterior axillary line, and inwards to the right margin of the sternum, and upwards as high as the third space. At the base a loud, rough rasping systolic bruit, of a different character to the apical one, can be heard, with a maximum intensity in the pulmonary area, followed by a muffled second sound; this bruit can be traced outwards and inwards to the aortic area, and upwards towards the left clavicle. Pulse 64 regular, full; the artery is not thickened.

Respiratory system.—The chest is emphysematous, and a somewhat hyperresonant note is obtained encroaching on the hepatic and cardiac dulness. There is some impaired resonance at both bases, with some moist râles and deficient air entry. The liver edge cannot be felt, and the dulness is diminished, but there is some tenderness in the right hypochondrium.

Urine.– Sp. gr., 1018–20 acid; urea, 1·5 per cent.; albumen present, one part per 1,000. Some granular casts were found.

Eyes.—React sluggishly to light and accommodation, peripheral opacities in both lenses. In the right eye the physiological cup was well marked. A small hæmorrhage from superior vein at edge of disc; all veins were swollen and exceedingly tortuous; some white lines along most of the veins. The patient was told at Moorfields two years ago that there was swelling of the disc of the eye. The left eye showed changes similar, but less marked. Probably old optic neuritis and arterio-sclerotic changes.

On May 30th, patient was seized with severe hæmorrhage from the rectum, and losing about two pints of bright red blood, she became very collapsed. Patient gradually improved, and has had no further hæmorrhage. A rectal examination revealed nothing but a rough and uneven condition of the mucous membrane, probably due to some internal hæmorrhoids. The heart sounds remain the same.

The following points are of chief interest in the case:—

1. The age of the patient. As pulmonary stenosis is invariably congenital, it seems highly improbable that this case should belong to that class, as they usually die early in life; but it may belong to the class in which there is evidence of stenosis after birth; and there are over ten cases on record.

2. The history of rheumatic fever at 14, and the question whether this led to endocarditis and chronic changes in the valves.

3. The marked clubbing of fingers and toes and the cyanosis, with no marked pulmonary condition to account for these.

4. The presence of the musical mitral systolic bruit, and whether the right sided valvular disease is in any way secondary to this.

5. The condition of the discs probably pointing to some arterio-sclerosis and renal changes. From this it is reasonable to think that there might be some atheroma of the pulmonary artery to account for the rough systolic bruit.

On the whole, the diagnosis is by no means certain, and many conditions were discussed in the ward, among them chronic pulmonary diseases, aneurism pressing on the pulmonary artery, etc., but perhaps that which met with most favour was pulmonary stenosis.

Since the above was written the patient has been steadily getting worse; she became very lethargic, constantly groaning and complaining of pain all over; she remained in this condition for about ten days and died on August 13th, about ten weeks after admission.

At the autopsy.—The lungs were emphysematous.

Heart.—On the anterior wall of the right ventricle there was a nodule of bony hardness, about the size of a pigeon's egg; at this point the pericardium was adherent; on section it was found to be cystic, with bony walls, and the contents of a putty-like consistency.

The right ventricle was hypertrophied, but not dilated, its walls measuring three centimetres in thickness. There was well-marked stenosis of the tricuspid valve, which only admitted two fingers; the flaps were thickened, puckered, and in part calcareous, the circumferential measurement being four inches. There was also extremely well-marked stenosis of the pulmonary valve, which was funnel-shaped, the sigmoids being adherent and calcareous, and the aperture only one centimetre in diameter; the main branch of the left pulmonary artery was enormously dilated, admitting three fingers, and its walls were extremely thinned, the right pulmonary artery was of normal calibre, and admitted the thumb only.

There was also stenosis of the aortic valve, two of the sigmoids being adherent and calcareous, while the posterior one remained normal. The mitral orifice was smaller than normal, but not markedly stenosed or the flaps thickened. There was no trace of atheroma of the aorta; its coats were much thinned in the arch, but became of normal thickness in the thoracic portion. The left ventricle formed most of the apex, but was not large.

The gall bladder projected one and a half inches below the liver margin and contained fourteen faceted gall stones. There was no obstruction to the duct.

The liver was nutmeg in appearance, and had abnormally dilated hepatic veins; weight 1,560 grms.

Spleen.—Weight 180 grms.; contained some small nodules of normal tissue, which were not definite infarcts.

Kidneys.—Weight 345 grms.; numerous cysts on surface, capsule strips off easily, leaving a very granular surface; cortex of normal thickness, but mottled.

The autopsy is of great interest, as it raises the question whether the lesion was of congenital origin, or due to old healed infective endocarditis, dating back to the attack of acute rheumatism which patient had at the age of fourteen years. E. I. C.

A Case of Syphilitic Testicles in an Infant.

THE following interesting case has been lately in Clinical. Fred L., aged 17 months was admitted under Dr. Washbourn on July 6th, 1901. Nothing definite could be made out of the family history. The child was an illegitimate one, and the mother died a few days after its birth. The previous history of the child was, in brief, as follows:—At the age of six weeks it suffered from snuffles; in March, 1901, a rash came out which was scattered all over the body, the patches being red, and afterwards became either ulcerated or scaly; the child was feverish at the time. There was no history of scarlet fever, measles, or diphtheria. In May the child was said to have passed no urine for two days, but this condition was relieved by hot baths.

On admission.—The child was a quaint looking creature. It had the typical congenital syphilitic facies. The skin of the face was mottled with yellowish-brown stains which were best seen in a strong light. There were a few patches of scaly erythema. The nasal bridge was very depressed, the forehead prominent and overhanging, and the occiput seemed to project unduly backwards.

The hair of the head was very scanty. The central incisors and first premolars were erupted and healthy. No epiphyses were found to be enlarged. The nails were normal. The eyelids of both eyes were swollen and red. The palpebral fissure of the left eye was reduced to a mere slit. On the upper lip, near the median line, was a dusky red brawny swelling which appeared to be quiet painless on pressure; it covered an area the size of a halfpenny and projected forwards about a third of an inch. On the dorsum of the right hand, and attached to the subjacent tendons, there was a small tumour like half a marble; the child cried lustily whenever this was touched.

The testicles were enormously enlarged, being quite the size of those of an adult. They measured two and a quarter inches in length, one and a half inches in breadth, and one inch in depth. Running obliquely across the sides, at the junction of the upper and middle thirds, there could be felt a shallow groove, which apparently divided the globus major from the body of the testis. Both portions were of stony hardness, the surfaces were smooth, and the child did not appear to feel any pain when they were pinched. The cords were normal. The testicles had been noticed to be enlarging for six weeks before the patient was brought up to the hospital.

The liver could be felt, and the spleen reached nearly to the umbilicus.

The case was diagnosed as one of congenital syphilis, and was treated at first with potassium iodide in small doses. No benefit resulting from this, inunction of Ung. Hydragyri was begun. Ten grains of the ointment were rubbed in twice a day.

By July 24th the swelling of the eyelids had disappeared, and the testicles were smaller, as also was the mass on the upper lip.

On July 26th the lids of the left eye became very œdematous and of a dusky red colour. The child could not see out of the eye, which was more swollen than it had been on admission. Salivation was noticed, so that the mercury was omitted for two days.

On July 29th the eyelids were still very swollen. Mr. Ormond saw the patient and thought that the œdema of the lids was due to passive venous congestion, probably from the pressure of a gumma on the veins at the back of the orbit. Potassium iodide was discontinued as symptoms of iodism developed.

The swelling of the eyelids gradually subsided, and the child was discharged on August 7th in a much improved condition. There was hardly any œdema of the eyelids; the lumps on the lip and hand had disappeared; the testicles only measured one and half

inches by one inch by half an inch, but were still quite hard. The friends were told to continue the inunction.

The chief interest in the case lies in the fact that the testicles were so extraordinarily large. Affection of the testis in congenital syphilis seems to be uncommon, and for them to be enlarged to the extent that they were in this case, to be very rare indeed. Hutchinson, in his Atlas of Surgery, figures a gummatous testicle taken from a boy aged twelve suffering from congenital syphilis. Henoch says that in fifteen years he met with twelve cases; the size varied from a hazelnut to a chestnut. In half of his cases only one testicle was affected. The youngest child was three months old.

Diday (Syphilis in Young Children. New Sydenham Soc.) does not mention affection of the testicles in the hereditary disease. Carpenter (Syphilis of Children) says that he has seen several cases. The most common complication in syphilitic infants, he says, is hydrocele; this is most common during the first four months of life, as also, he says, are the changes in the consistency of the organ. He has not seen the nodular swellings described by Fagge on the surface of children's testis. Gummata are rare; the enlarged testis being due to simple inflammation passing on to the formation of fibrous tissue. The epididymis, Carpenter says, is usually not attacked.

As to the prognosis, Henoch says that it is only in the early stages, before the formation of fibrous tissue, that treatment will do any good. If fibrous tissue has been formed the glandular tissue is destroyed, and impotence and sterility result. Sir Samuel Wilks showed a case of enlarged testis before the Pathological Society in 1865, and in this case, after three months treatment with mercury, they had returned to their natural size.

T.H.B.D.

Obituary.

Julius St. Thomas Clarke, M.D., M.S.

A notable Guy's man has just passed away. Dr. Clarke entered at Guy's in 1859, and quickly took a front rank among the students. He greatly distinguished himself, and not only won the Treasurer's Gold Medal in Surgery, but obtained also a Scholarship and Gold Medal in Anatomy, and a Gold Medal in Physiology at the Intermediate M.D. Examination of the University of London. For family reasons Dr. Clarke entered upon general practice in his native place, Leicester, before taking his degree, but his indomitable energy and remarkable ability enabled him in the year 1863 to obtain the M.B. degree with honours in every subject. Among his fellow graduates were Drs. Pye-Smith, Mr. Walter Rivington, Dr. Frederick Roberts, and the late Bishop of Bloemfontein.

Dr. Clarke continued in practice at Leicester till his death, and was greatly esteemed and respected for his high character and unswerving integrity. He soon became Honorary Surgeon to the Leicester Infirmary, and enjoyed the fruits of a large practice. This did not, however, satisfy his ambition, and he found time amid the cares of his onerous engagements to take his B.S. and M.S. degrees, besides that of M.D. Lond.

It will be remembered that in October last Dr. Clarke was shot by a lunatic at short range. The bullet passed through the sacrum and lodged in the neighbourhood of the rectum. Clarke's life hung for long in the balance, but eventually he made a fair recovery. He died on August 2nd suddenly, just after his return from a holiday, to the great regret of his sorrowing patients and friends, at the age of sixty-four years. He leaves a large family. One of them, Dr. Astley Vaverton Clarke, is well known to many Guy's men; and a daughter, a Graduate in Science at the London University, is a charming writer on scientific subjects.

Eosinophilia in Psoriasis.

The statement is made that in certain chronic skin diseases, including psoriasis, the percentage of coarsely granular eosinophile leucocytes in the blood is increased.

Phrear (*Clinical Journal*, December 26th, 1900, p. 155) says: "Other forms of skin disease, notably psoriasis and urticaria, may be associated with an increase in the coarsely granular blood cells; and all I would say about these is that the leucocytosis appears to depend on the superficial extent of the cutaneous affection rather than on its nature or severity."

Ehrlich and Lazarus (Histology of the Blood, translation, p. 150) quote Canon as having found as many as 17 per cent. of eosinophile leucocytes in skin diseases, especially prurigo and psoriasis; and also as having noted that the increase of the eosinophile cells is connected with the degree of extension of the disease, rather than with its nature or local intensity.

H. G. Brooke, writing on Psoriasis in Clifford Allbutt's System of Medicine, makes no reference to eosinophilosis.

We have made differential counts of the leucocytes in sixteen consecutive cases of psoriasis, which were under the care of Dr. Perry in the Skin Department. Films were made with cigarette paper, fixed for twenty-four hours or more in equal parts of absolute alcohol and ether, and stained in:—

(*a*) Five per cent. Grübler's alcoholic eosin in 70 per cent. alcohol, for thirty seconds, and washed with distilled water.

(*b*) Saturated aqueous solution of Grübler's methylene blue, cold, for ten to thirty minutes; washed with distilled water; allowed to dry; and mounted in Canada balsam.

The counts were made under a $\frac{1}{12}$th oil immersion objective, a mechanical stage being used. A thousand or more consecutive leucocytes were counted in each case. The following table contains our results:—

THE CONDITION OF THE PATIENT.						TOTAL LEUCOCYTES COUNTED.					PERCENTAGE OF DIFFERENT LEUCOCYTES.			
NAME.	Age.	Extent of Psoriasis Eruption.	Duration.	Treatment.	Other Affections.	Small Lymphocytes.	Large Lymphocytes.	Polymorphonuclei	Eosinophile.	Total.	Small Lymphocytes.	Large Lymphocytes.	Polymorphonuclei	Eosinophile.
Lucy E. ...	15	Knees, arms, scalp, subacute	Months ...	None ...	—	385	40	601	20	1046	36·8	3·8	57·5	1·9
George E. ...	18	Elbows, arms, hands ...	Recent: first attack	„ ...	—	457	79	512	49	1097	41·7	7·2	46·7	4·4
Thomas E....	4	All over body and limbs, and head	2 months ...	„ ...	—	357	77	588	14	1036	34·5	7·4	56·8	1·3
Martha R. ...	56	Both knees and both elbows	25 years ...	„ ...	Dyspepsia	382	40	697	46	1165	32·8	3·4	59·8	4·0
Eliza A. ...	34	Hands, arms, neck, not acute	Several years ...	„ ...	—	391	71	530	69	1061	36·9	6·7	49·8	6·6
Ellen R. ...	70	Very extensive, over knees, elbows and shins	2 years altogether; recent acute exacerbation	„ ...	—	397	84	581	17	1079	36·8	7·8	53·8	1·6
Fredk. C. ...	59	All over, more or less chronic	29 years ...	„ ...	—	281	64	453	46	844	33·3	7·6	53·6	5·5
Amy N. ...	7	Body, arms and legs. Guttate	3 weeks acute; once before	„ ...	—	330	60	688	9	1087	30·3	5·5	63·3	0·9
Thomas C. ..	4	Most extensive. All over limbs and body	2 months; first attack	1 week ...	—	439	40	606	21	1106	39·7	3·6	54·8	1·9
Lucy J. ...	40	All limbs, trunk, neck, head	22 years; recent acute	„ ...	Subacute rheumatism	409	67	543	6	1025	39·9	6·6	53·0	0·5
Susan H. ...	40	Legs and arms bad; a few on body	27 years ...	„ ...	—	533	152	910	102	1697	31·4	9·1	53·6	5·9
Sarah L. ...	30	Legs, knees; not on arms ...	3 months ...	2 weeks	—	391	66	537	32	1026	38·1	6·4	52·3	3·2
Leopold V....	17	Legs, thighs; elbows getting better	2 months ...	5 weeks	—	450	51	543	3	1047	43·0	4·8	51·9	0·3
John D. ...	28	Simply smothered all over	3 months; second attack	3 months	—	359	26	644	14	1043	34·4	2·5	61·8	1·3
Baird S. ...	60	Scalp, knees, elbows ...	18 months ...	Some time	—	422	38	603	4	1067	39·5	3·6	56·5	0·4

For purposes of comparison, we give the proportions normally found in the blood, according to—

	Small Lymphocytes. Per cent.	Large Lymphocytes. Per cent.	Polymorpho-nucleated. Per cent.	Eosinophile. Per cent.
(*a*) Ehrlich and Lazarus (*loc. cit.*, pp. 73–76)	22–25	2–4	70–72	2–4
(*b*) Moncton Copeman (Clifford Allbutt, Syst. of Med., Vol. v., pp. 416–418)	10–20	10	75	2

Taking 4 per cent. as the highest percentage of coarsely granular eosinophile cells met with in health, only four of our sixteen cases exceed the normal. In only one of these was the attack acute. In the other three cases, the disease had been present for many years. On the other hand, among those in which the percentage was normal, several had very extensive skin lesion, and in some the attack was acute.

We had intended to investigate the coarsely granular eosinophile cells only; but as a side issue, we may point out that in all the cases the proportion of polymorphonucleated cells was lower than normal; while that of the small lymphocytes was invariably higher. We do not know if other observers have found this to be the case.

J. A. BUTLER.
H. S. FRENCH.

Notices.

THE BEANEY PRIZE IN PATHOLOGY, 1901.

The above Prize has been awarded to Mr. H. S. French, and a Certificate to Mr. G. G. Davidson.

THE BEANEY SCHOLARSHIP IN MATERIA MEDICA.

The Beaney Scholarship in Materia Medica will shortly become vacant. The Scholarship, open to candidates who have received part at least of their medical education at Guy's Hospital, is of the annual value of £30, and is tenable for three years. Further particulars may be obtained from the Dean, to whom applications must be addressed, at the Medical School Office, not later than October 3rd, 1901.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

Notice concerning the Cartwright Prize.

This Prize was founded by the "Association of Surgeons practising Dental Surgery" with the object of commemorating the services of Samuel Cartwright, F.R.C.S., in improving the status of the Dental Profession not only by inducing many of those engaged in its practice to become fully qualified Surgeons, but also by assisting to gain the recognition of Dentistry as a special branch of Surgery by the institution of a Licence in Dental Surgery by the Royal College of Surgeons of England.

The "Association of Surgeons practising Dental Surgery" having been dissolved, the administration of the Fund for the endowment of the Prize has, under an order of the Charity Commissioners, been entrusted to the Royal College of Surgeons of England, and the Prize is now offered for competition under the following conditions:—

Cartwright Prize.

1. The Cartwright Prize will be awarded quinquennially, and the first award will be for the five years ending 31st December, 1905.

2. The Prize consists of a Medal executed in bronze and an honorarium of £50.

3. The subject for the essays to be submitted in competition for the Prize is "The Surgical Diseases having their origin in abnormal or diseased conditions of the Teeth and their Structures, the essay to be illustrated by pathological and microscopical specimens."

4. Candidates for the Prize must be persons engaged in the study or practice of Dental Surgery and possessing qualifications capable of registration under the Medical Acts of the United Kingdom. (*A Diploma or Licence in Dental Surgery without a Medical or Surgical Diploma or Degree will not be a sufficient qualification.*)

5. The Prize will be awarded to the author of the best essay written in English upon the proposed subject, if such essay is considered of sufficient merit.

6. Every essay must have a motto or device and must be accompanied by a sealed paper containing the name and address of the author, and having on the outside a motto or device corresponding with the motto or device on the essay.

7. Each essay must be addressed to the Secretary of the Royal College of Surgeons of England, and delivered at the College not later than 4 o'clock p.m. on the 31st December, 1905.

8. The manuscript Prize essay and every accompanying drawing and preparation will become the property of the Royal College of Surgeons of England.

9. Every unapproved essay which is unclaimed at the expiration of twelve months from the date of its receipt will be returned, with any accompanying drawing and preparation, to the author thereof at the address given in the sealed envelope.

S. FORREST COWELL, Secretary

Licence in Dental Surgery.

Notice is hereby given that in future the Second or Final Professional Examination for the Licence, under both the Old and the New Regulations, will be divided into two parts, viz.:—

Part I. General Anatomy and Physiology, General Pathology and Surgery.

Part II. Dental Anatomy and Physiology, Dental Pathology and Surgery, and Practical Dental Surgery.

Candidates who have complied with the necessary conditions may present themselves for the two Parts separately or they may take the whole Examination at one time. In the latter case Candidates may be referred in one part only.

Notice is also given that Candidates who enter at a recognised Dental Hospital and School on or after the 1st May next will be required, before admission to Part II. of the Second Professional Examination, to produce evidence of having attended a course of Dental Bacteriology and a course of Dental Materia Medica.

S. FORREST COWELL, Secretary.

Pass List.

University of London, July, 1901.

INTERMEDIATE EXAMINATION IN SCIENCE AND PRELIMINARY SCIENTIFIC EXAMINATION CONJOINTLY.

Examination for Honours.

Chemistry (Third Class).—B. J. Smart, F. T. H. Wood.

Experimental Physics (Second Class).—W. H. Miller.

INTERMEDIATE EXAMINATION IN SCIENCE.

PASS LIST—Second Division.

F. W. Hogarth.

Honours Candidate recommended for a Pass.

W. H. Dencer.

PRELIMINARY SCIENTIFIC (M.B.) EXAMINATION.

Entire Examination.

First Division.—J. S. Bookless, H. O. Brookhouse, G. Cockcroft, H. F. Vandermin.

Second Division.—E. Alban, A. W. Berry, J. E. Hodson, T. B. Layton, P. F. McEvedy.

Chemistry and Experimental Physics only.—S. W. Daw, A. L. Foster, E. C. Lowe, St. J. A. M. Tolhurst, A. Zorab.

Biology only.—C. A. Basker, J. A. Bulbrook.

First Conjoint Examination, July, 1901.

Part I.—Chemistry.—E. A. Collins, R. B. Dawson, A. C. Dickson, T. H. Edey, T. R. Harvey, A. V. Ledger, B. B. Metcalfe, H. H. Moyle, E. E. Rendle, A. Shepperd. Reginald Willan.

Part II.—Pharmacy.—E. J. Crew, C. F. Fraser, A. W. Gater, F. C. Whitmore.

Part III.—Elementary Biology.—E. A. Collins, T. Norman, F. W. Parfitt, M. R. Smith, G. G. Timpson, W. W. Vaughan.

(Four Years' Regulations.)

Part II.—Materia Medica.—D. R. T. Griffiths.

Royal College of Surgeons of England. July, 1901.

LICENCE IN DENTAL SURGERY.

Preliminary Science Examination.—H. E. Collett, W. E. Derriman, W. J. Goodman, T. J. Green, R. G. Harrington, A. L. Moon, S. W. Robinson, R. A. Scott.

School Examinations, July, 1901.

Histology Examination.—J. B. Ball, T. H. Barton, R. J. Bentley, L. H. Burner, A. H. Clough, A. B. Cocker, W. C. M. Dickey, R. Edridge, G. F. Greening, E. M. Harrison, C. P. Harvey, R. P. Lewis, E. F. Milton, H. V. Mitchell, J. O. Musson, T. Norman, O. S. Norton, T. C. Pocock, J. E. Scales, F. A. Sharpe, L. D. Stamp, E. White, R. O. Williams, H. D. Wyatt, A. M. Benett, G. Hamilton, G. H. Cheyney, H. C. Malleson, A. Shepperd, T. Turner, P. C. Litchfield, R. S. Harper, M. Leckie, E. W. Routley, E. L. Norton, E. H. Adams, R. W. Allen, G. N. Bartlett, I. R. Cook, A. D. Crofts, H. S. Knight, F. H. Lennox-Jones, F. M. Longson, A. B. O'Brien, W. P. Purdom, M. de L. Robinson, E. Bellingham Smith, H. A. Watney, W. Welchman, F. T. H. Wood, C. C. A. de Villiers, W. H. Trethowan.

Appointments.

CIVIL.

Hunt, Ernest, L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Kingsteignton District by the Newton Abbot (Devon) Board of Guardians.

Porter, A. E., M.D., D.P.H., Cantab, has been appointed Assistant Medical Officer for the City of Leeds.

Papers by Guy's Men.

A Case of so-called "Fœtal (Congenital) Rickets." By Henry Ashby, M.D., F.R.C.P.—*The Lancet*, 17th August.

What Administrative Measures are necessary for Preventing the Sale to the Public of Tuberculous Meat. By Shirley F. Murphy, M.R.C.S. Eng., L.S.A.—*British Medical Journal*, August 3rd.

Introductory Remarks made at the Opening of the Section of State Medicine at the Annual Meeting of the British Medical Association. By Shirley F. Murphy.—*Ibid.*, 10th August.

Passim.

The new Editors of the Guy's Reports, Dr. Bryant and Mr. F. J. Steward, are to be congratulated on the promptitude with which they have published their first volume, for it is only a few months since they undertook this work. That they hope to publish another volume before the end of the year shows they are determined to bring the Reports up to date without delay, if they can only continue at this rate in 1903 their task will be accomplished.

A glance at the contents discloses the surprising fact that there is not a single contribution from the surgical side; anyone who has been round the wards, or seen the operative work done in the hospital must feel that this can't be for want of cases full of exceptional interest, or because, as a hospital, we are lacking in the enterprise to introduce and perfect new methods of surgical treatment. It is to be hoped that the forthcoming volume will contain some papers representative of the surgical work done at Guy's.

Arrangements have been made by which all subscribers or members of the Clubs' Union, who are entitled to a volume of the Reports, will receive the current volume, without reference to the year in which the subscription was paid. For example, a man who paid a subscription in October last will be supplied with Volume LV., although it is really the number for the year 1898.

Since this is the first number of the Gazette after the publication of the report on the meeting of the British Medical Association at Cheltenham, we cannot but comment on the splendid manner in which our hospital was represented there. Dr. Goodhart delivered the presidential address in Medicine, everyone who reads it will be well repaid and will lament that he was not there to hear it. In his presidential address before the Pathological Section, Dr. Washbourn spoke of the principal diseases met with in South Africa. Dr. Pavy read a paper on Experimental Glycosuria, and Dr. Horrocks opened the discussion in the Obstetrical Section.

About a year ago we called attention in these columns to a scheme by which the whole of the various departments of the Hospital were to be placed in telephonic communication with each other. The essential part of this project, which called for particular notice was an automatic switchboard, whereby the idiosyncracies of an attendant were entirely avoided. The equipment of the small central station for the supply of electrical power for hospital and laundry purposes necessitated the temporary shelving of the less urgent telephone system, but now that matters are running smoothly over there beyond the new nursery, a very substantial advance has been made towards what will be the most perfect system of communication ever applied to a hospital. A preliminary installation of twenty-five units has already been delivered, and the Engineering department is at present engaged in experimental work with a view to complete familiarization with what is a most beautiful example of electrical genius.

Most people have seen some sort of telephone exchange where a tired and irritable attendant pegs together the expectant telephonists. Even the tiny little apology in the College is sufficient to show the necessity for a trained 'change hand, who should devote his whole time to the switchboard. In the automatic exchange, however, there is, as the name implies, no living central control. Electricity, generated by secondary batteries, connects, disconnects, or warns that the line "is engaged. Ring again please." Suppose that Lazarus wants to ask Philip whether Mr. So-and-so is in the ward. Turning to the list of telephones the operator sees that Philip's number is, say, 6625. His own telephone is 6643, and on the face of the instrument he sees a pivoted dial bearing ten holes numbered 0 to 9. Putting his finger in hole 6 he rotates the dial until it is arrested by his finger reaching a fixed stop. He then allows the dial to swing back and repeats the

process for the remaining figures. Should the line be free he is now in communication with Philip, and taking the receiver off the hook he can proceed with his quest. Should, however, someone else be talking with Philip, the man in Lazarus will hear a loud buzzing produced by a hummer at the exchange, which will warn him to try a bit later. And when, supposing he got through at the first attempt, the conversation is finished, the act of hanging up the receiver automatically disconnects the two instruments.

THE apparatus which produces such extraordinary results as these must naturally be extremely sensitive and highly complex. Yet despite the fact that two such essentials would rationally suggest a strong predisposition to break down, this automatic exchange has been fitted elsewhere in London with marked success. There is no reason to suppose that our own instruments will be any less successful, and we anticipate, in a few months time, that the system will be running with the absolute certainty of a gauged machine. Of the switchboard itself, the very soul of the invention, it is impossible to speak. After watching the busy ticking and swift movements as line joins line; after peeping at the myriad parts and the hopeless tangle of connections, one comes away with a profound sense of gratitude that the mechanism of automatic exchange is not included in either medicine or physiology.

VISITORS to the Glasgow International Exhibition would find, in one exhibit at least, much to remind them of Guy's. Messrs. Down Bros. have an interesting display of surgical instruments and appliances, all of the latest pattern and many of them familiar to the present generation of Guy's men. A very complete and ingenious table is shown, with demonstrations on the unwary, and although a sudden elevation to the Trendelenberg position amply proved the immense leverage at the disposal of the operator, the exhibition struck the victim as undignified, although intensely diverting to the onlookers. A novel pair of scissors, with unequal lengthed handles, for use by thumb and little finger, leaving the master finger free for other purposes, struck us as being of undoubted utility. The thumb can readily be withdrawn and yet the scissors will remain in the hand; thus in any operation involving the repeated use of scissors a lot of time and not a little irritation could be avoided by the use of this instrument. Apropos, it appears that the city of all improvements is by no means in the van as regards aseptic surgery. Most of the obsolete methods still hold good and the spray is by no means a museum specimen.

As many of our readers will know, an old Guy's man, Dr. Koettlitz, is aboard the "Discovery," now on her way to the Antarctic regions, acting as surgeon to the expedition. He also holds the position of chief of the scientific staff. Dr. Koettlitz's experience with the Jackson-Harmsworth Expedition, in which he served in a similar capacity, will stand himself, and all the members of the crew, in good stead during the forthcoming trials of health by the rigors of a polar climate. All will join in wishing a successful outcome to their endeavours and a safe return home.

IN our sports columns will be found the report of the past cricket season, which was held over from our last issue for lack of space. Although the team did not do as well as they might have done in some of the matches, chiefly owing to the fact that the team varied in strength to a considerable extent during the season, they covered themselves with glory in the Cup ties, and eventually won the Cup for Guy's by easily defeating St. Bart.'s, which is now a matter of history.

BARBER heads the averages in batting, closely followed by Wyatt and Langdale, and in bowling Wyatt has done best, with Poyser a good second. The latter has done particularly well on occasions and his performance in the Final Cup Tie was one of the features of the match. As many of this year's men are available for next season, it is not too much to hope that

we may have as good a team to defend the Cup next year as we have had to win it this.

It has been suggested to us that a few empty bottles ought to be kept in the front surgery, so that when the dispensary is closed after eleven o'clock it would still be possible to supply any case that needed immediate treatment with medicine without waiting until the next morning. It is a deeply-rooted idea with the Boro' mother that midnight is the most suitable time to bring her vomiting baby up, and whilst the ever-popular life-saving draught may be enough to satisfy the mother and the half-penny evening paper, the H.-P. would often like to put the patient under regular treatment at once; however, it must be remembered that the hospital does not undertake to supply bottles to out-patients, so if this idea is to be carried out it must be by private enterprise and arrangement.

During the coming autumn we hope to publish a series of practical papers on subjects of everyday importance. Already various members of the Staff have promised to write on "Rectal Feeding," "The Use of Alcohol as a Stimulant," "The after treatment of Tracheotomy," "Paracentesis." It is expected they will be especially valuable to men about to plunge into the thick of practice.

Nursing News.

Matron's Office.

On July 29th Probationer Bolton was appointed Head Nurse in Bright ward.

On August 6th Miss E. M. Lewis, who entered the Hospital as Probationer in March, 1897, was appointed Probationary Sister of the Isolation ward.

On August 21st Nurse Tompkins, Head Nurse in Patience and Samaritan, who completed her training in July last, left the Hospital, and Probationer Lowenthal was appointed to succeed her as Head Nurse in Patience and Samaritan.

Acknowledgments. — St. Bartholomew's Hospital Journal, The Manchester Medical Students' Gazette, Clinical Journal, The Polyclinic, The Therapist, The Hospital, and Treatment.

Pyorrhœa Alveolaris.

This paper was read before the Dental Society on March 15th, 1901, by Mr. J. W. Walton, and received the Society's Prize.

Mr. President and Gentlemen,—To choose for a paper of this kind a subject about which so little is certainly known, may seem to be but courting failure. When others—amongst them men of ripened experience—have failed after prolonged study to arrive at a common conclusion, how can I, you may fairly ask, have anything to say which shall be worth the hearing? Let me tell you, then, at the outset, that anything of originality which my paper may contain will not lie in the presentation of new facts, but in the arrangement of those which are familiar in an unfamiliar way, so as to form, I hope, a sequence at once coherent and interesting.

Dental caries is a disease widespread, second to none in the extent of its ravages. Happily for us, its etiology is somewhat fully understood, and successful treatment is a matter of every-day practice. Pyorrhœa alveolaris is of far less frequent occurrence, but in it we are face to face with an unsolved mystery, no treatment has yet been devised of universal application and of lasting success.

Let me recall to you a familiar picture. Look at a mouth which shows no signs of departure from normal health. There are the teeth—incisors, canines, bicuspids, molars, occupying their anatomical positions. These organs are of dense structure. Over a framework, or base of dentine, lies a thin covering of enamel, the latter a calcified tissue of epithelial origin. Enamel is almost entirely dissolved by acids. The dentine, too, is a calcified structure. Leaving the crown of the tooth and passing downwards we come upon a third hard tissue, the cementum, which resembles true bone far more closely than either enamel or dentine, and forms the superficial layer of the root of the tooth. Since each of these three layers is formed by the deposition of lime salts within a soft tissue, it is evident that when formation is at an end, the layer of cells which would next have undergone change is left in apposition with the calcified surface. Thus we have the pulp chamber lined with odontoblasts, the enamel with ameloblasts, and the cement with cementoblasts. This fact will be alluded to later.

Two soft structures lie in external relation with these. Between the cementum and the bone of the jaw lies the alveolo-dental periosteum—a single thickness, performing the double function implied by its name. It may be briefly described as consisting of white fibrous tissue. The fibres are transverse, arranged in bundles near to the bone, but forming a fine interlacing network close to the cement surface. As "Sharpey's fibres" they pass on the one side right into the bone substance; and on the other, into the cementum, and being placed somewhat out of the horizontal plane, allow the tooth a fair degree of movement without themselves suffering injury. Amongst

the cells which are seen in the membrane we may notice two varieties—a layer of cementoblasts lining the cementum, another of osteoblasts lining the bone. The blood-vessels which supply the pulp of the tooth send offshoots to the periosteum, which form its main supply. It is furnished, in addition, with smaller branches from the vessels of the gum and of the bone. The nerve-supply is, practically speaking, derived from the same triple source.

It is thus clear that the periosteum forms a pocket which is completely filled by the tooth, and that it lines a slightly larger but similarly-shaped depression in the bone.

Outside the tooth socket the bone is lined by a periosteum of analogous structure. Here the latter lies subjacent to the gum, the two being intimately blended, the fibrous bundles of the periosteum, spreading out amongst the dense network of the gum, bind the latter firmly down to the bone. The gum lies in close apposition to the tooth at its neck, shutting off all access to the periosteum of the root.

Facts such as these will be elementary to one and all, may I ask you to bear them in mind whilst my picture undergoes a rapid transformation?

In such a mouth, the owner being most frequently a woman between twenty-five and forty years of age, the gum immediately around a sound healthy tooth begins to alter in appearance. It exhibits signs of inflammation, its margin thickens and becomes rounded, and the attachment to the tooth is lost to a gradually increasing extent. As the pocket grows larger the tooth gets looser and looser; a foul discharge appears, both stagnant around its neck and welling up by the side upon pressure, imparting to the breath a nauseating odour. Secure some of this fluid and submit it for examination to the chemist and to the microscopist! The former will find in it most of the constituents of the saliva which normally bathes the part, an amount of dead matter and a large proportion of pus; the latter will detect numerous micro-organisms. At this stage the patient will probably feel pain, but it is usually neuralgic, not local.

In this manner the alveolo-dental periosteum may be removed symmetrically right round the tooth, but the process far more commouly begins in front and runs downward towards the apex, the area of destruction widening as it increases in depth. By that portion which still remains healthy the tooth will be maintained in position.

Coincidently the bone of the alveolus is destroyed, and the process continuing long enough, the pocket grows larger and larger, and the tooth ultimately falls out. Very seldom is a single tooth attacked; two, and often more, fall victims; they may be adjacent or widely separated. One author[1] of repute goes so far as to place the molars, lower incisors, bicuspids, upper incisors and canines in this order of susceptibility, further stating that he has never seen the whole of the series simultaneously falling victims. Frequently we notice a symmetry of attack, in which both a tooth and its fellow of the opposite side fall victims.

Examine the teeth carefully. They are pitted by absorption. Tartar is present upon them in threefold form. Above the gum, visible whilst the tooth was still in situ, is the ordinary light yellow incrustation. Below gum level, where it is hidden from view, this merges into a hard, dark, nodular ring, completely encircling the tooth. Still deeper lie deposits of the same nature, hard, nodular, stained, reaching sometimes to the very apex. Needless to say the inflammatory disturbance, the discharging socket, the tartar, combine to give the mouth a peculiarly repulsive appearance.

Examine the empty socket, it is more or less denuded, but sometimes merely wasted, without denudation. When the lining membrane has disappeared, the bone has receded and become rough upon the surface; should the disease have been of a more or less chronic nature, the edge of the socket will be thickened.

Now, gentlemen, there is a picture for you: if you take in its details fully you will be relieved of a difficulty which perplexed me at the very outset, viz., a confused perception of the nature of the disease. This is a pyorrhœa alveolaris, and a good deal more than that, for "*pyorrhœa*," as a rudimentary knowledge of Greek will tell you, means simply "a flow of pus from the alveolus." Thus the name is at fault, since it indicates, not the nature of the disease, but a *symptom*—neither the most important, nor even constantly present. If, following a well-known text-book[2] we call it "a molecular disintegration of the periosteum, accompanied by absorption of the alveoli," the true scope of the affection becomes clearer, but its exact nature still remains undecided. With a fine disregard for logical accuracy a dozen other writers have applied as many names to the disease: we read of "conjoint suppuration of the gums and alveoli"; of "expulsive gingivitis"; of "phagædenic pericementitis," and what not!

The case before us is, let me admit, typical, and happily of a severity not usually reached. But I wish to impress upon you one fact, and without an appreciation of it it is useless to proceed, that true pyorrhœa alveolaris—using this merely as a name—is what has been depicted to you, and that a condition which differs in any material degree from this is not the real thing. You may see an inflamed gum, a large accumulation of tartar, and an accompanying discharge which resembles suppuration, and, calling this pyorrhœa, be wrong; again, you may have the absorption of the bone and the loosening of the teeth, without inflammatory symptoms, and again make a false diagnosis. Such a case as that first cited is curable, true pyorrhœa is not, and it is this lack of clear definition which has been responsible for the existing confusion as to the true nature of the disease, the result of which has been seen in the proved futility of methods

1 Magitat.

2 Smale and Colyer.

of treatment hitherto advocated. Some have laid claim to be discoverers of infallible remedies, as for example, the application of an antiseptic to the "pockets" of gum. Thus they have removed for a time some of the visible symptoms—just long enough for a great flourish to be made—but these have presently returned in as severe a form as before, clear evidence that the operator had not gone to the root of the matter at all. Others, falling into the opposite error, have in their treatment disregarded some of the symptoms, not recognising their importance, and they, too, have failed equally with the rest. Let us try to examine the question in a more reasonable light.

Two symptoms alone are constant, and as such, demand primary consideration.

1. The inflammation of the alveolar-dental periosteum.
2. The absorption of the bone.

What is bone? To answer this question requires some knowledge of the way in which it is developed. At a very early period indeed there is no bony tissue in the body, and, in most places where it will presently form, cartilage is seen. The lattter is firm and elastic in texture, bluish in colour, with neither vascular nor nervous supply. It consists of a clear matrix in which small groups of roundish nucleated cells are seen. When bone is to be formed these cells multiply in number, increase in size, and form larger groups. In a second stage they are seen to be arranging themselves in straight rows pointing towards the ossifying surface, to which the largest cells lie nearest. The matrix persists between these rows, but, as the process continues, it becomes impregnated with lime salts, and is now opaque. The next change is seen in the cell-columns, which have been shut off from one another by the calcification of the matrix. They multiply and are transformed into three new varieties which, together with the appearing blood-vessels, constitute red marrow. The smallest and most numerous are osteoblasts, clear in colour. Reddish cells of an intermediate size are called erythroblasts: the largest of all are clear, multinucleated, and have a partial origin in already-formed osteoblasts; these are the osteoblasts, or giant cells[3].

The red marrow is the site of ossification. The osteoblasts pass to the sides of the channels in which they lie, and secrete around themselves osseous material, remaining, as living cells, in the centre: they keep up a connection, as it were, with the outer world, by sending out processes to their neighbours. By a continuance of this process the bone is built up around the medullary canals, which are *not* obliterated, but still contain, in the living bone, the three varieties of cells.

A bone does not grow merely by getting thicker. During its advance toward maturity it is taken down and rebuilt several times over. We thus readily see how it is that a bone is so admirably fitted to resist the forces which operate upon it. Where pressure has to be met, a definite thickness is built up on mechanical principles, where pressure lessens, atrophy is seen. Both constructive and destructive processes are physiological, the one the function of the osteoblasts, the other of the giant cells. By mysterious means the latter dissolve away the lime salts in their neighbourhood. The imprisoned osteoblasts are set free, multiply, and become transformed into osteoclasts in numbers sufficient for the work of absorption to be fully carried out. Destruction in one part goes hand in hand with construction in another, until that form is reached which is best adapted to the altered conditions.

It is evident that in the adult bone, cells of all three sorts will still be present, permeating the structure in every part. There will, in addition, be a complete layer upon the surface, which would next have become ossified had this been necessary. This is the deepest layer of the periosteum, the most important layer, so near to being actually bone as to merit the name of "osteoid tissue." If the bone ever needs partial reconstruction, to meet new lines of pressure, to repair injury, osteoblasts are always upon the spot, ready to play their part: and if absorption becomes necessary, there, too, are the osteoclasts, ready to carry it out.

This fact, that bone is not a mere inert solid mass, possessing no inherent vitality, should be carefully borne in mind. From soft tissue it came, to soft tissue it is ever ready to return. "The bone of the skeleton is but the skeleton of the bone."

Irritation of a soft tissue causes its inflammation, wherever the soft tissue be found. A bone may thus be in an inflamed condition similar to that of any other structure. But it is placed somewhat at a disadvantage in this respect, that when an attack is made upon it, its forces, so to put it, have to be mobilised before they can resist the invader. The process of mobilisation is absorption; osteoblasts must be set free by osteoclasts, and in their turn recruit the ranks of the latter. This accumulation of living cells forms the granulation tissue. Succeeding changes I need not detail, for they are familiar to you. One fact is of import. When the irritation ceases, reformation normally occurs to replace the absorbed surface. But should the attack have been severe or long continued the granulation tissue will be overcome, and lose its vitality far more readily, for the reasons given, than would be the case in a soft tissue; here absorption is permanent.

We thus clearly see the significance of the worn and eroded appearance presented by an inflamed, and especially a chronically-inflamed bone. This is not a mere destruction, but an effort at repair.

This lengthy digression has served to remind us of an important fact; it is this:—Before we knew what bone was, of what action and reaction it is capable, we spoke of two constant symptoms of pyorrhœa—inflammation and absorption. In the light of our newly-acquired knowledge, we see that the two have become one—stages of a continuous process. Absorption of bone, wherever it occurs, physiologically or pathologically, with or without apparent cause, is an unchanging change, the local

3 Coats.

manifestation of an inflammatory state resulting from irritation.

What, in pyorrhœa, is the primary irritant? Let us, collecting all possible sources, classify them thus:—

1. Irritation due to local abnormal conditions.
2. Irritation due to general abnormal conditions.

The teeth whose sockets are attacked are usually perfectly healthy from first to last, showing no deviation from the normal to indicate that *they* are the source of the trouble. We certainly find the cement-surface pitted by absorption, but the significance of this will now be apparent. This absorption is no more due to internal causes than that seen in a temporary tooth. Caries, as a complication of pyorrhœa is quite exceptional, though analysis of a typical discharge from the pockets establishes the presence of many of the ferment-germs which have so great a share in its pathology. The neutralising factor is undoubtedly to be found in a pronounced alkalinity of the saliva, strikingly evidenced by the considerable tartar deposits.

Precisely the same holds good for other morbid conditions of the tooth; none of these can act as direct and sole irritating cause.

Malposition is rather more interesting. If tooth and socket are so placed as to stand considerably in front of or behind the arch, the mucous membrane becomes apparently tightly stretched over the convex root. Absorption of the projecting wall is here of frequent occurrence, from a cause which we may sum up as "mild chronic inflammation due to mild, but long-continued pressure." Pyorrhœa undoubtedly often attacks such teeth in a severe form; but, on the other hand, the socket wall may disappear without giving rise to any decided symptoms, almost unnoticed by the patient, save for the tooth-loosening. These conflicting facts are at first sight somewhat puzzling, and the pyorrhœa appears to be due to purely local cause. To this I shall recur later, at present contenting myself by merely denying that it is so. Pyorrhœa attacks many a tooth not so placed.

Abnormal articulation has a similar bearing upon the subject. It is an axiom that a tooth will only react successfully to those forces which it is designed to meet: abnormal stress, in abnormal direction, sooner or later sets up pathological processes which tend towards the loss of the tooth. These, comprising in addition teeth which have been regulated, "not wisely, but too well," are also likely subjects for pyorrhœa. I will similarly dismiss these for the present, asking you again to remember how few attacks fall under this heading.

A third possible local source of irritation is uncleanliness. Let me be emphatic upon this point. Uncleanliness is *not* a cause of genuine pyorrhœa, though it frequently brings about a condition which, more or less, simulates it. The accumulation and fermentation of fragments of food in the intervals between the teeth, especially beneath tartar, is so irritating to the gums (to say nothing of the teeth themselves) as to produce much congestion. And when, as a result of the inflammation, a yellowish serous discharge is present, the differential diagnosis is occasionally hard to make. Thorough cleansing of the mouth will decide. If the condition be one of true pyorrhœa, it will *remain*—though ameliorated; if it be *not*, health will be restored. No mouth, however carefully looked after, is proof against the disease.

This last point brings me to consider what part, if any, may be played by micro-organisms. Certain facts may be briefly enumerated. Germs are present in every mouth, but in vastly-increased numbers in all morbid and unhealthy conditions. They collect principally in the buccal sulcus, and upon the gum margins. Systematic cleansing of the mouth operates with surprising efficiency in reducing the number; we must remember, however, that it is not only the germs which are removed, but also the culture-media. Their indefinite increase is regulated by a slight germicidal action of the saliva, the phagocytic action of the tonsil, and by a "struggle for existence," or reciprocal action by which mutual destruction takes place.

Many specific organisms are present—accidentally as it were—introduced in food, or during respiration; others, few in number, constitute a normal flora.

Arguments chiefly used to support the idea of a bacterial origin of pyorrhœa are these:—

1. Pyorrhœa is so distinctly characteristic an inflammatory condition that a specific organism must be the governing factor.

2. Germs are always found in large number in the discharged fluid.

3. The disease spreads from one tooth to those adjacent in a manner inexplicable upon any other supposition. The disease is contagious[4] and once appeared in an epidemic form in Switzerland.

These three points may be severely criticised. In reply to the first it may be urged that other inflammatory conditions of bone and periosteum, every wit as severe and characteristic are clearly shown NOT to be primarily due to bacterial agency. In some, as acute arthritis, the pus contains all the ordinary pyogenic forms, but none peculiar. Those which occur are obviously responsible for the suppuration. Chronic osteo-arthritis, an incurable disease, characterised by gradual degeneration of joint-cartilages is likewise explainable without the aid of any germ theory. All common pyogenic organisms—*staphylococcus pyogenes aurens*, *staphylococcus pyogenes albus*, etc., are found in a pyorrhœa discharge; thus we argue, they of themselves cause the suppuration.

As against No. 2: The abundance of germs in the pockets is a well-established fact; one observer found twenty-two species. But neither he nor any other investigator has isolated any species which conforms to the tests required before a pathogenic organism can be admitted as of specific function. The most important of these tests is that the organism in question must not be found in other diseases; when inoculated, it must reproduce the lesion in its characteristic form, and be

4 Magitat.

itself demonstrable in the affected tissue. *Spirochætæ dentium and spirillum sputugenum*, two regular inhabitants which long defied cultivation, but which, after much care and patience, were finally isolated by Mr. Goadby, are found plentifully, not only in pyorrhœa, but also in other inflammatory conditions of the mouth. Mr. Goadby himself claims no more for them than this, and their presence in no way explains the course of a true pyorrhœa. Were this the case, the conditions which favoured the growth of the germs would pre-eminently favour the production of pyorrhœa, which would be especially a disease of the poorer classes, but it is *not*.

In answer to the third argument, we may say that the disease spreads readily from tooth to tooth because of continuity of tissue. There is no proof whatever that it is contagious, and only one writer has affirmed this; the wish, in this one case, seems to have been father to the thought. A dentist never contracts the disease from his patient. As to the Swiss epidemic, I can obtain no particulars. If such occurred, it might well have followed upon a prevalence of the predisposing causes to be mentioned presently.

A final and most important consideration is this:—If specific organisms are responsible for the initiation of the disease, how did they in the first place obtain a footing? Forms which occur in the mouth lie in contact with the tissues without injuring them. In caries, preparatory decalcification of the enamel is essential to their activity. So long as tooth and gum are united, the periosteum is protected; thus the germ is clearly not the primary cause of its inflamed condition.

The frequent symmetry of the attack argues strongly against a germ invasion from the mouth; though, as in similar conditions elsewhere, the blood might here be the means of communication. But, let me repeat, no form has been isolated to prove this.

Known facts all point to one conclusion—germs do not initiate, but frequently maintain the condition. Tooth and periosteum once separated, infection of the wall of the socket soon takes place—suppuration therefore occurs. This view harmonises perfectly with the known amelioration which follows the local use of antiseptics.

A catarrhal theory must be briefly mentioned. This is based upon the continuity in structure between the dental periosteum and the deeper layer of the mucous membrane. Catarrh of the mucous membrane, it is urged, cuts off the blood-supply to the periosteum, which therefore sloughs. But the periosteum is supplied chiefly by the inferior dental vessels. This theory, therefore, falls to the ground, as a fancy to which facts have been accommodated.

Tartar is all but constant in pyorrhœa cases, occurring both in ordinary and in characteristic form. What is *its* function?

The combination of salts, mucus, and other matter which is called tartar, is precipitated from the saliva wherever that fluid remains more or less at rest. The friction of mastication and mechanical cleansing of the teeth greatly hinder its accumulation. For extensive deposition to take place an alkaline reaction and a minimum of friction are essential. Deposits grow in size mainly by additions to the surface which lies against the gum; here it is rough and irritating, whilst the surface presented to the tongue is smoother. Thus when the accumulation is great, as we see sometimes upon lower front teeth, the mere mechanical irritation is often severe enough to lead to inflammatory processes in gum and periosteum, alveolar absorption, and loosening, if not actual loss, of the teeth. Since such a condition will frequently be attended by considerable fœtor of breath and a sanious discharge from the gums, there is apparently strong *primâ facie* evidence for the view which makes tartar the primary cause of pyorrhœa. But a close examination of the two conditions shows striking points of difference.

A most conclusive objection lies in the fact beforementioned, that pyorrhœa is so often seen attacking the mouth in a symmetrical manner, frequently, indeed, the very teeth which are least liable to receive a coating of tartar. In cases such as these a purely local agency is strikingly contra-indicated.

Tartar might, of course, be deposited symmetrically, but such is exceedingly unlikely especially where the teeth in question are widely separated, and when it is remembered how very unsymmetrical may be the friction which so often hinders its deposition.

But we have a stronger argument still in quoting those typical cases of pyorrhœa in which no tartar at all has been found. A recent writer suggests that here a deposit, originally present, has been dissolved away by an alteration in the chemical nature of the surrounding fluid; the idea is surely far fetched.

Again, if tartar be a primary cause, why is not pyorrhœa ten times more frequent? How many patients do we see and treat, the "scaling" of whose teeth is a lengthy and laborious task? The teeth have become tender, and are sometimes displaced in all directions, subjected to endless deviations from normal stress. The local conditions for the production of the disease seem to be perfect, but the disease is not present. Here removal of the tartar brings about a complete return to the normal, no such good result follows similar treatment in a genuine pyorrhœa.

These points are amply sufficient for my purpose, yet, for the sake of completeness one or two others may be adduced.

How did the ring of hard dark nodular tartar, lying just below gum-level, get into that position, unless the gum and periosteum were previously removed? It could not have done so. When a deposit collects below gum-level in the common way, it is because that which lies above the gum has set up a slight inflammation of that tissue and drawn it away from the tooth. Irritation of many kinds will do this, and clearly the tartar which collects below as a *result* is not itself the *primary* cause

of the subsequent trouble. Large deposits may, too, exist for years, without bringing about much separation of the gum from the tooth.

In wild animals we seldom find tartar accumulating except upon teeth put out of use by injury; pyorrhœa is, nevertheless, fairly frequent amongst them.

I still have to discuss the part played by the hard nodular deposits upon the root itself, which reach in many cases right down to the apex. These are of some importance, since an erroneous estimate of their nature has been the basis of a theory which assigned to pyorrhœa a different origin altogether. This view is the outcome of American research, and must at least be said to possess the merit of ingenuity. In brief, its supporters claim that pyorrhœa is a result of gout, and support their assertion by stating that the hard deposits, which they term *serumal* calculus, contain uric acid. In order to be perfectly clear, let me digress for a moment.

Gout is a disease of middle and advanced life, in which, owing to the presence in the blood, by defective metabolism, of a great excess of uric acid, a deposition of urates of sodium takes place, at first in the joint of the great toe, and subsequently in other joints, such as those of the hand. The mechanical irritation set up by these deposits is so great as to cause an acute arthritis, which after a considerable time produces marked deformity. The soluble sodium salt is, perhaps, a quadriurate, which, coming into contact with sodium carbonate, is transformed into insoluble *bi*urate, and thus assumes a crystalline form. The deposition of these salts takes place in paroxysms, corresponding to irregularities in diet, the disease being accompanied in its later stages by great debility. Joints appear to be the site of the local manifestations for three reasons:—

1. Because they are of low vitality and somewhat low vascularity.

2. Because they are exposed to injury.

3. Because the cartilage and synovia are rich in sodium salts.

Since gout is a joint-disease, it is necessary, in order to give due force to the contention of a gouty origin for pyorrhœa, to regard the tooth and socket as together constituting a joint. This view has been urged by several anatomists, and with much force, but it matters little whether we accept it or no, for the advocates of the "gout" theory do not appear to base their claim upon very reliable evidence. The earliest assertion was that these dark nodular deposits consisted *entirely* of urates, and were therefore of gouty origin, derived not from the saliva, but from the blood. A later modification spoke of "a trace of urates," and in support, various delicate, but often fallacious chemical tests were relied upon. The results thus obtained are discredited by many equally careful ocservers, who, having made elaborate analyses, have failed to detect the urates in more than a small percentage of cases. Tomes very fairly points out that the whole position is illogical. If only *traces* of urates be found, the concretions differ from those of ordinary gout; and again that it is scarcely likely that an arthritis set up by the deposit should be due to its least important constituent. Uric acid may normally be detected in small quantities in the blood, and we may admit the possibility of an inflammatory exudation of this, as well as of other constituents. In this way small masses of calcareous material, similar in nature to callus, might be deposited upon the root, containing a "trace of urates," and discoloured by various pigments. There is thus no need whatever to presuppose the existence of gout in all cases of pyorrhœa, if present, it would be sufficiently evident before pyorrhœa could set in.

We have, for the sake of argument, been here assuming that the so-called serumal calculus was capable of initiating the inflammatory condition. We have indeed admitted that, if it were deposited under normal conditions, the lesion would be perpetuated by it in the same way as by visible tartar. But let me be emphatic upon this point, and say, once for all, that the hard deposit, low down upon the root, was not, in the great majority of instances, antecedent to, but followed the removal of the periosteum from cervix downwards. I can find no authenticated case in which it can be proved that such deposits were formed before the neck of the tooth became free. Tartar, if formed slowly, is always dark and hard, strongly adherent to the teeth, varying in colour according to the habits of the individual, and to the situation in which it is found. If pus or other fluid has had access, it will show a dark green superficial stain, quiet unlike that of the ordinary variety. It is thus clear that, for the most part, all tartar present, whether above or below the neck, is of salivary origin, deposited *after* the commencement of the pyorrhœa: serumal calculus may, and probably does occur as a purely secondary consequence. As a foreign body, the tartar will aid in *maintaining* the condition, but it is itself incapable of *initiating* it.

The last possible local cause of pyorrhœa is gingivitis, or inflammation of the gums. Much the same reasoning is here applicable. Pyorrhœa, in most typical form, may attack perfectly healthy gums; we therefore exclude this as of primary significance.

The mention of gout brought us to the borderland between local and general irritations; the transition from one to the other is easy.

Typical pyorrhœa is found in connection with, or accompanying, a variety of general conditions, which may be roughly classified thus—

1. Structural disorders.
2. General diseases.

Foremost in the first-class stands rickets, a disease of childhood, due chiefly to anhygiene and malnutrition, which leaves behind it great weakness. It is an interference with ossification, by which the *preparatory* stages are greatly exaggerated—the *completion* hindered. Bones are affected in preference to other organs, because they are the most rapidly developing tissue.

Mollities ossium is similar, but seen in adult life. The disease consists in a solution of the bone, with gradual increase of the medullary spaces, giving an appearance of decalcification.

Mr. Bland Sutton, in the course of research in Comparative Dental Pathology, has established the fact that the absorption of the alveoli accompanying these disorders is seen, not only in man, but in many of the lower animals.

Coming to general diseases, we have gout—already described—rheumatism, an allied disorder. Albuminuria, which, like diabetes, the next on the list, is characterized by the presence in the blood and urine of poisonous products; anæmia, or want of blood, and lastly, eruptive fevers. Typhoid is the chief offender amongst these latter. During convalescence, or subsequently, pyorrhœa frequently supervenes in more or less typical form. I have not been able to ascertain why this should be. Smale and Colyer somewhat vaguely speak of "a degeneration of fibrous tissue" which follows all eruptive fevers; but one is left but little the wiser.

In order to obtain information which would be both new and interesting, I have been in communication with several Maidstone dentists, who, since the disastrous typhoid epidemic of a year or two back, have had under their care hundreds of the sufferers. From two only, I regret to say, is any decided help forthcoming. The first somewhat ambiguously tells me that he has "not observed anything more than the ordinary case of pyorrhœa alveolaris, not due to typhoid." The second speaks very definitely: "I have certainly had under my care a very great number of the patients who had typhoid during the epidemic. They have been very *free* from pyorrhœa, but the gums have shown a great tendency to recede." The latter fact is extremely suggestive, but without direct bearing upon the question; the former is the more interesting, because unexpected.

Taking one fact with another, genuine pyorrhœa attacks resulting from typhoid fever, appear to be mild in nature.

These various affections are the most important of those which are complicated or followed by pyorrhœa. summarising them briefly, we see in all either a deficiency or an impure condition of the blood.

Two facts emerge clearly from the rest--

(1). One or other of these general conditions is nearly always, or has previously been present in persons suffering from true pyorrhœa.

(2). Pyorrhœa is not a *constant* symptom of any.

What possible inference can be drawn but this:--The general disorder is the predisposing cause, and since we have proved that no merely local irritation can initiate the pyorrhœa, we are bound to assume that when the disease attacks an apparently healthy person who can give us no history of general disorder, such must invariably have been present unknown to him.

Why should pyorrhœa manifest itself in the alveolar processes? For two evident reasons:—

1. They are transitory structures, of distinctly lower vitality than others.

2. They occupy a situation especially liable to injury or local irritation.

The chain of evidence is now all but complete. Here are the predisposing causes, here is the part, prepared for attack, exciting causes are not far to seek.

Sometimes none is needed, for the toxic products in the blood will prove sufficiently irritating. Note here the explanation of a *symmetry* of attack. When such an agent is present in the blood it will be carried by the circulation to all parts of the body, similarly affecting each lateral half.

No exciting cause will be usually necessary in a *wasting* disorder.

In the remaining cases some local irritant must operate to favour the commencement of the pyorrhœa, and to maintain it when once set going. This is the true significance of tartar, micro-organisms, and the rest. Tartar will irritate the gum, and the gum the subjacent bone, and if both be deficient in vital resistance, the pyorrhœa follows. So with a gingivitis due to other causes, and so with both, when pyogenic germs abound. So with the outstanding tooth-socket, and with the "regulated" tooth. But all these—"complications" I may term them—are to be regarded as accidental, each with a definite significance; you see to what *in*significance they will sometimes sink.

Over the final link in the chain we need not delay. What is the *nature* of the pyorrhœa. The symptoms may be regarded in two aspects.

1. It is an inflammation of bone, an osteitis.

2. It is a joint inflammation, an arthritis.

It matters but little which view one adopts, for the two are closely connected to a definite though often multiple cause. You may differentiate, if you wish, and can obtain the necessary data, between an osteitis, and a caries of the bone.

Is it not evident why the prognosis of real pyorrhœa is so bad? How could it be otherwise if predisposing causes persist? If they early cease to operate, and all local irritation be removed, there is a chance of recovery, if not the case is incurable, the only appropriate treatment extraction—excision of the "joint." Other means are palliative.

Such are the facts and fancies, gentlemen, which the limits of my paper allow me to place before you. A candid friend advised me to enunciate a theory of my own, however absurd it might be. Refusing the advice at the time, I have, perhaps, after all, carried it out. It is not easy, when one has to wade through a diffuse literature, to avoid being influenced by that writer who has succeeded in saying the most, but I trust to have escaped this danger. Speaking as a student to students, I have done my best to present each side in its most suggestive aspect, to eliminate the worthless, and above all to be clear. I hope I have succeeded.

Sport.

Cricket.

On Saturday, July 15th, a very fairly successful cricket season came to a close. The chief feature was the winning of the Cup, the last time Guy's held it being in 1897. The totals in each round were especially large, aggregating in three innings a total of 1,452 for 24 wickets. In club matches the balance of wins is held by our opponents, some of the losses being in a great measure due to the regular team not turning out. As can be seen below, Barber again heads the batting average and Wyatt the bowling. Mention should be made of Graham-Smith's consistent wicket-keeping, greatly assisting Poyser in the upturning of wickets with his slow leg-breaks, which came off in a remarkable fashion in some matches, notably the second innings of St. Bartholomew's in the Final Cup Tie.

Number of Matches played 19. Won 9. Lost 8. Drawn 2.

BATTING AVERAGES.

(10 innings and over.)

	No. of Innings.	Not out.	Runs	Highest Score.	Average.
H. Barber ...	16	2	740	180	52·86
H. D. Wyatt	14	2	592	104*	49·33
H. M. Langdale	18	1	742	106	43.65
G. S. Graham-Smith	17	3	458	118*	32·21
M. C. Wetherell	16	3	318	102*	24·46
C. M. L. Cowper	12	5	148	52	21·14
F. Morres ...	17	1	294	50	18·38
R. C. Poyser	18	1	303	63	17·82
A. R. Wilson	13	3	149	57	14·9
E. A. Collins	10	0	136	47	13·6

(Under 10 innings.)

T. A. Chignell	3	1	106	75*	53·0
E. L. Norton	3	0	111	92	37·0
H. R. Grellet	7	2	127	52*	25·4
E. Morgan ...	7	2	115	73*	23·0
T. C. Bowle	5	0	99	48	19·8
A. L. Foster	6	1	55	22	11·0
J. T. Bookless	7	1	58	36	9·6

Also batted one: G. N. Bartlett, 16*, A. E. Cawston, 3, T. Morgan, 0*, H. J. Palmer, 0, R. Willan, 0, J. H. Donnell, 0, E. H. B. Milsom, 0, H. Bacon, 0, Harris, 0.

* Not out.

BOWLING AVERAGES.

(20 wickets or over.)

	Overs	Maidens.	Wickets.	Runs.	Average.
H. D. Wyatt	109	20	28	365	13·04
R. C. Poyser	192	7	37	582	15·73
C. M. L. Cowper	178	36	23	576	25·04
M. C. Wetherell	254	50	32	910	28·44

(Under 20 wickets.)

A. R. Wilson	86	1	16	146	9·12
G. S. Graham-Smith	38	8	4	131	16·49
E. Morgan ...	88	17	13	310	23·85
A. L. Foster	85	12	10	267	26·7
J. T. Bookless	61	12	7	189	27·0

Also bowled:—H. Barber (3–0–1–37), H. M. Langdale (3–0–1–11), T. Chignell (8–1–2–27), F. Morres (8–0–2–32), E. L. Norton (4–0–1–20), H. C. Bowle (7–0–0–33), —. Harris (12–1–1–34).

2ND XI.

The season was brought to a close by the easy defeat of Bart.'s, at Honor Oak Park, on July 16th, making the record of the season an excellent one, as of the 12 matches played 9 were won, 2 drawn, both greatly in our favour, and only 1 lost, that being against Reigate Priory, whom we played for the first time. We can safely say that the 2nd XI. this year was the best that we have had for several years, the regular tail being very much better than formerly and not leaving all the run-getting to be done by the top men, who, however, batted consistently all through the season. The fixture card was not large, and perhaps another year we might play better teams.

BATTING AVERAGES.

(Not less than 4 matches.)

T. A. Chignell	46·1
J. Bookless	34
E. L. Norton	33·5
S. C. Bowle	31·2
R. Willan	26
A. H. Turner	23·3
E. W. Strange	25·2
H. M. Tolhurst	20·4
H. T. Palmer	16·1
J. Goss	6
J. Donnell	2·5

Fifteen other men played in less than four matches. Unfortunately the bowling analysis was not always kept, but Chignell was by far the most successful bowler, taking the majority of the wickets in almost every match he played. Norton, Bookless and Bowle were responsible for most of the other wickets.

Births.

GODSON.—On August 2nd, at Linden House, Cheadle, Cheshire, the wife of John H. Godson, M.B., B.C., D.P.H., of a daughter.

ROWLAND.—On August 21st, at 10, College Road, Brighton, the wife of Walter J. Rowland, M.B., of a daughter.

TIPPER.—On August 20th, at 32, Firdel Road, Catford, the wife of Ernest Tipper, M.D., of a son.

Marriage.

LAVERS—HANNUM.—On August 7th, at St. Mary's, Wroxham, Norfolk, Norman Lavers, M.D., of Tasmania, to Bessie Gertrude Le Mesurier Hannum.

Death.

CLARKE.—On August 2nd, suddenly, at Norwood House, Leicester, Julius St. Thomas Clarke, M.D., M.S. Lond., F.R.C.S.

ED.—D. G. G.

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Notice.

All Communications, Articles, Letters, Notices, and Books for Review, should be forwarded, accompanied by the name of the sender, to the Editor, GUY'S HOSPITAL GAZETTE, *Guy's Hospital, S.E.*

Any of our Subscribers who may be desirous of having their numbers of the GAZETTE *bound should leave them with the Librarian.*

The annual Subscription to the GAZETTE *is* 6s. 6d.; *post free,* 7s. 6d. *All financial communications, as well as subscriptions, should be sent to the Financial Editor,* Mr. C. H. WELLS, SECRETARY'S OFFICE, GUY'S HOSPITAL.

The charge for binding in blue, with the Arms of the Hospital in gold will be ONE SHILLING AND SIXPENCE.

Calendar of Coming Events.

September, 1901.

Sat. 14.—Messrs. Jacobson and Fripp's take-in; Drs., G. W. Smith and S. L. Pallant; Cl., A. C. H. Gray.
Last day for sending in Fees and Certificates for Camb. D.P.H. Exam.

Mon. 16.—Names of Candidates for Entrance Scholarships to be sent to Medical School Office by this date.
Second M.B. Durham Exam. begins.

Tues. 17.—Application to Medical School Office for Schedules for 1st and 2nd Conjoint Exams. to be made not later than this date.

Thur. 19.—Messrs. Howse and Symond's take-in; Drs., F. M. V. Smith and G. S. Robertson; Cl., T. H. B. Dobson.

Fri. 20.—Names of Candidates for Entrance Scholarship in Dental Mechanics to be sent to the Medical School Office by this date.

Sat. 21.—Last day for applying to Registrar for Form of Entry for Final M.B. Lond.

Mon. 23.—Third and Final M.B. Durham Exam. begin. Exams. for M.D. and M.S. Durham begin.

Tues. 24.—Exam. for Entrance Scholarships begins. Application to Medical School Office for Schedules for Final Conjoint Exam. to be made not later than this date.

Thur. 26.—Messrs. Lucas and Lane's take-in; Drs., H. Tipping and K. Anderson; Cl., G. Clarke.

Sat. 28.—Students' Number of the GAZETTE published.

Guy's Hospital Gazette,

SEPTEMBER 14, 1901.

Are not many Patients supposed to be suffering from Gastric Ulcer really suffering from some other disease?

CLINICAL LECTURE BY DR. HALE WHITE.

July 3rd, 1901.

(continued.)

I mentioned to you just now that this disease which we are trying to differentiate is related to chlorosis. Every ward clerk knows that these young women who come in with hæmatemesis are frequently chlorotic. I believe the condition is, like chlorosis, confined to women. It is like chlorosis in occurring at the same age in women, namely the period of greatest sexual activity, and, as with chlorosis, the symptoms of it pass away before the menopause. It is one of the rarest things in medicine to see a woman become chlorotic if she has reached the age at which menstruation ceases, and the figures that I have given at once show you a sudden drop in the number of cases of the disease I am trying to describe at the climateric, and still more when the menopause i past. You must remember that the figures given include the cases of the condition I am trying to describe, together with the cases of genuine gastric ulcer.

Older writers believed in vicarious menstruation, and cited these cases of gastric hæmorrhage as instances of it, for these patients usually have amenorrhœa. We do not believe nowadays that hæmorrhage from other parts than the uterus is menstrual, but this we do learn—that the older observers were struck with the frequency with which these young women bled, and they obviously did not regard the hæmorrhage as due to ulceration, or else they would not have talked about it as vicarious menstruation.

Another point I want to suggest to you. You know that of all anæmias there is none that is more accompanied by dyspepsia than chlorosis, and may it not be that the reason why chlorosis

is so often associated with the condition I am trying to describe to you is that the chlorotic dyspepsia is nothing but an early stage of the condition which we are describing.

The last point I would bring before you as showing that these cases ought to be marked off from gastric ulcer, and are examples of some other disease is this. Dr. Salter was my house-physician a few years ago and he and I often talked at the bedside about this disease. I was discussing it with him again a few weeks ago, and he told me that he found as a result of a large experience that young women between twenty and thirty, suffering from nausea, pain in the stomach, sickness and hæmatemesis, recovered when treated like chlorosis with iron, more quickly than by any other method. And Dr. Hood, whose pamphlet I have here, has treated these people on the same lines and found that they do well upon iron.

Now, although you have often heard me tell you at the bedside what I have told you this afternoon, I have never quite liked to give you a clinical lecture on the subject because what I have told you is directly contrary to what you will find in text-books. All these young women with nausea, pain, sickness and hæmatemesis, are usually included among cases of gastric ulcer. The reason that I bring these views before you now is, that in opening the abdomen to look for the source of bleeding in the stomach surgeons have confirmed what I have been urging upon you. For instance, the surgeon who has done most in this direction is Mayo Robson, and I have here this quotation of his from the *Lancet*. He says: "If no ulcer be found anywhere and the bleeding proves to be capillary or from small undiscoverable ulcers." It is not perhaps quite obvious how the bleeding could be proved to come from an ulcer if you could not discover the ulcer, but it is clear that what the author intends to convey is that he is aware that you can open the stomach for severe hæmatemesis and discover absolutely no ulcer at all. Again, writing in the *British Medical Journal*, Mayo Robson says:—"Erosions.—Of these Dieulafoy has described two varieties: (*a*) Simple erosions, consisting apparently of mere abrasions on the surface epithelium, which, though so small as to be scarcely perceptible to the naked eye, may give rise to the most alarming hæmorrhage. On the post-mortem table abrasions of this kind may be easily overlooked, but as seen when hæmorrhage is going on, the mucous membrane seems to be studded with numerous bleeding points." This surely is a different disease from that which we know to be gastric ulcer, with its possible sequelæ of adhesions, sub-diaphragmatic abscess and other well-known complications, and it is surely more likely that the abrasions were the result, rather than the cause, of the hæmorrhage.

Dr. Newton Pitt kindly allows me to refer to a patient under his care, as she illustrates my point. She was a woman, aged 37 years, who for seven years had been liable to attacks of gastric pain, vomiting, and hæmatemesis. She was admitted into Guy's Hospital blanched and collapsed, and died from hæmatemesis. The most careful examination at the necropsy failed to detect any source for the blood. The stomach was sent to the museum, and the curator, Dr. Lauriston Shaw, failed to find any ulceration of it.

Dr. Frederick Taylor also kindly allows me to mention the case of a woman who was admitted into Guy's Hospital under his care. She had for several years been seen by Dr. Lauriston Shaw, as an out-patient, for gastric pain, vomiting, and hæmatemesis. The stomach was opened, but no ulcer or source for the hæmorrhage could be found. The patient made an excellent recovery."

So there you have one case in which the stomach was opened during life and no source of bleeding was discovered; and you have another patient who did what these people hardly ever do—the prognosis is so good, she bled to death, and at a most careful post-mortem examination not a trace of ulcer was discovered.

Dr. Hood also quotes some cases bearing on the question. Thus, there was under the care of Dr. Stephen Mackenzie a woman who had suffered from repeated attacks of hæmatemesis. She had been in the hospital on three separate occasions and had been considered to be the subject of gastric ulcer. At last she died from

hæmatemesis, and at the autopsy no sign of the disease could be discovered in the stomach. Here is another one: on September 26th, a young girl suffering from anæmia, aged 21, applied at Dr. Barton's house at 10 a.m. She stated that while walking in the park she was siezed with vomiting, and threw up about a tea-cupful of blood. At 1 p.m. Dr. Barton was summoned to the house where she was, and he found she had brought up an immense quantity of blood, and soon hæmatemesis returned. A few days later the patient was siezed with mumps, and died of hyperpyrexia. At the post-mortem no source of the bleeding could be discovered.

So here we see two other cases of the same kind that died, and at the post-mortem not a trace of ulcer could be found.

There are other cases. For instance, Hirsch records the case of a young woman, aged 25, who had pain, vomiting, and hæmatemesis. The stomach was opened and no ulcer was found, and so it was sewn up. The patient recovered completely. Armstrong gives the case of a woman, aged 35, in whom the stomach was opened because hæmatemesis was so severe, and he reports that "no deep excavated ulcer was found, but blood was seen oozing from three different places, which looked like linear fissures in two places, and in the third like a stellate fissure. Around the fissures for an area of one centimetre was an aparent loss of superficial epithelium." You see there is no hint of what we know as an ulcer. Here was blood oozing from three separate parts and it might easily have torn the epithelium away. Mr. Mansell Moullin opened a stomach for severe hæmatemesis. The patient was a woman, aged 34. He says: "One very small bleeding point was found in the posterior wall of the stomach near the pylorus. It could scarcely be called an ulcer."

Yet another case to which Mr. J. A. B. Hammond has called my attention is one recorded by Dr. Chapman in the *Intercolonial Medical Journal of Australasia* for March, 1901. The patient was a woman, aged 27, who had a history of hæmatemesis and other symptoms taken to indicate gastric ulcer. She was operated upon but no ulcer was found, and she died three days after the operation. Even at the post-mortem no ulcer of the stomach could be found.

There is a case that you might say would be against the view I am urging. It is published by Mr. Gilford in the Guy's Hospital Reports a few years back. The patient was a young woman who for fifteen days had been suffering from severe hæmatemesis. On account of this Mr. Gilford opened the stomach and everted the whole of the mucous membrane through an opening in the wall of the stomach and looked at it most carefully, and he is perfectly certain that no ulcer was present. She died nine days afterwards, and then, in a position where an ulcer could not have been missed at the time of operation, one was found. So that this case teaches that for fifteen days the woman bled severely, and yet there was no ulcer whatever. It does not teach you that the symptoms including severe hæmatemesis were caused by an ulcer, but it does suggest that in this condition the manipulation necessary to thoroughly search for an ulcer may lead to ulceration. If future experience confirms what I think, Mr. Gilford's case suggests, it clearly becomes of great importance to diagnose the condition I am describing from a genuine ulcer.

In passing, you will notice that all these nine cases I have related in which, although bleeding was profuse no ulcer was found, occurred in women. I have come across none in men. This strongly supports my contention that the condition I am trying to describe is confined to women.

Another reason why I regard it as very important that you should diagnose this condition from genuine ulcer is this: I have read to you several cases in which there was no ulcer, but, worse than that, the bleeding did not proceed from one point but from many points, so that the surgeon could not possibly deal with it; and indeed Mayo Robson says: "Although the operative treatment of parenchymatous or capillary hæmorrhage by any surgical method would seem to be of doubtful value," and then he refers to five cases which died. So that if I am right in supposing that this condition ought to be separated from ulcer, it appears

that the separation is a matter of extreme importance.

If a woman is bleeding dangerously from an ulcer, possibly it might be good treatment to open the stomach and search for the source of the bleeding. But if there is no ulceration, it is probably very bad treatment to open the stomach because the manipulation might make the bleeding worse, it might lead to ulceration; and, as the blood often oozes from several points, it may well be impossible to control the bleeding when the stomach is opened. Further experience appears to show that these patients not infrequently die after an exploratory operation, while they rarely die if no operative treatment is undertaken.

To sum up: what I have tried to bring before you to-day is the suggestion, for which I think there is much evidence, that many young women suffering from gastric pain, vomiting, and hæmatemesis, are not suffering from gastric ulcer, but from some disease of which we do not know the pathological explanation, but which is closely related to chlorosis. Further, in these cases surgical interference with the object of stopping the bleeding is wrong. The bleeding is usually controlled by giving the stomach complete rest and feeding per rectum. If it is very severe, it may be well to give half a drachm of the Liquor Ferri Perchloridi with half a drachm of glycerine by the mouth every hour for a few doses, and very rarely it may be well to transfuse saline fluid. The patient must be kept absolutely quiet on her back.

Papers by Guy's Men.

Results of Tendon-Grafting in Infantile and Spastic Paralysis. By A. H. Tubby, M.S., F.R.C.S. Illustrated.—*British Medical Journal*, 7th September.

Observations on Suppurative Pericarditis in Children. By G. F. Still, M.D.—*Ibid.*

A Clinical Lecture on South African Dysentery. By J. W. Washbourn, C.M.G., M.D.—*The Clinical Journal*, 28th August.

The Practice of Blood-Letting. By J. F. Briscoe, M.R.C.S. (concluded).—*Ibid.*

A Clinical Lecture on a Case of Muscular Atrophy. By J. H. Bryant, M.D., F.R.C.P.—*The Clinical Journal*, 7th September.

Intussusception and its Treatment.

An Analysis of 58 cases from the records of Guy's Hospital, by J. A. B. HAMMOND and D. G. GREENFIELD.

The question of the treatment of Intussusception having recently held such a prominent position in medical discussions, it was thought that an attempt to discover what the Guy's Hospital Medical Reports could teach us on this subject would not be devoid of interest.

A few years ago distension of the bowel held the first place as a method of treatment, but of late the number of advocates for primary laparotomy has largely increased, so much so, that in a discussion on this subject at Cheltenham, during the visit of the British Medical Association, the vast majority of the speakers expressed it as their conviction, that immediate operation was the treatment which held out the best prospect of success.

During the last twelve months and more, several members of the surgical staff have resorted with success to immediate operation, and consider it to be the treatment of the future. Nevertheless, there are others who maintain that the more conservative method of inflation should be given a trial in all but a few cases.

It is the object of this analysis to set forth, as far as is possible, the merits of the respective treatments, and in passing to bring out points from the reports which seem worthy of interest.

As many of the opponents of inflation are sceptical as to the claims of successful treatment by this method, in the majority of cases, attributing the results to an error in diagnosis, we may say that all the cases from the Guy's reports on which the present study is based, are believed to be genuine cases of intussusception. The diagnosis rested in all cases on the presence of a tumour in abdomen, or felt per rectum, or was afterwards verified by laparotomy or post-mortem examination. All cases appearing in the index of the reports as "?" have been discarded.

As the records at Guy's are somewhat wanting in cases of primary operation, we have, to make the analysis of more value and the conclusions drawn from it more reliable, ventured

to abstract statistics given by various surgeons writing on intussusception.

The subject may be divided into the following heads:—

A. Distension of bowel by air or liquid.

B. Operative treatment.

1. Operation following inflation.
2. Primary operation.

C. Expectant treatment.

A.—*Distension of the Bowel.*—One of the strongest arguments against this method is, that, assuming the number of enteric and ileo-cæcal intussusceptions to be rather more than a quarter of the whole (on which most authorities agree), the treatment is foredoomed to failure on account of the physical impossibility of fluid exerting pressure higher than the ileo-cæcal valve. Added to this is the fact that in some of the earliest cases the gut cannot be reduced, except under very great pressure, on account of œdema of the ensheathed part, and in the later cases it is also impossible, owing to the formation of adhesions.

Amongst the dangers attendant on this method, sudden collapse and death is said to occur; but must be rare, as there is no case in the present series. A more real danger is rupture of the gut and consequent peritonitis. Perforation of the bowel was seen in several of the cases treated here, chiefly in association with gangrene of the intestine, but only in two, or possibly three cases, was the rupture attributed to pressure exerted by distension.

Distension is also criticised as unscientific; but its utility will be the only point considered here.

There can be no doubt that valuable time is often wasted when inflation is practised without success, and the patient is exposed to a more prolonged or even an additional anæsthetic, thus prejudicing his chances of recovery. The latter often occurs when the intussusception is felt to recede under pressure, and is eventually thought to have been reduced. There is a large number of these cases, with several recurrences and eventual laparotomy or death, in which inflation was thought to be successful in the first attack and in the following, but on opening the abdomen, the last part of the intussusception, often less than an inch in length, was found to be quite irreducible.

Distension is still practised at Guy's, and we think, with sufficiently favourable results to justify its continuance. But at other hospitals the results have not been so gratifying, thus in twenty-four cases published by Mr. Eve, treated at the London Hospital by inflation, six died, and the remaining eighteen required laparotomy. Inflation therefore failed to cure one case. Again, in seventy-two cases collected by Mr. Wiggens, inflation was followed by failure in 75 per cent. In the present series of cases, forty-seven have been treated either by inflation or injection, in twenty-two of which the procedure was successful, and in the remaining twenty-five death occurred, or laparotomy was practised, either occurrence being counted as a failure. The results are as follows:—

	Cases.	Successes.	Failures.
First day of disease	11	5	6
Second „	12	7	5
Third „	13	5	8
Fourth or more days	12	3	9

From these figures it may be claimed that distension was, on the whole, as successful as other forms of treatment, particularly in the earlier days of the disease. It is to noted that of the failures, a majority of which went on to operation, were not by any means all fatal. This will be treated under the head of secondary operation.

Distension of the bowel, therefore, we consider, holds out a good chance of success in the first two days, a fair chance on the third, and a poor one on the fourth day of the disease. Although the percentage of recoveries is less on the first than on the second day of these cases, there can be no doubt that the success of the treatment is inversely proportional to the duration of the symptoms.

As to the relative merits of inflation by air, or injection by milk or other fluid, there is a variance of opinion among different authorities. The supporters of inflation claim that as air is elastic, it is less likely to cause rupture or to damage the bowel. On the other hand, it is more difficult to gauge the pressure used in reduction than in the use of fluid.

The advantages claimed for fluid, other than the purely mechanical ones, are that the injection of a warm fluid will tend to counteract the collapse of the patient and will be useful in supplying the fluid which repeated vomiting has often rendered the patient in urgent need.

The figures from Guy's, however, shew that inflation by air has given better results than injection by fluid.

	Cases.	Reduction.	Deaths without further operation.	Subsequent laparotomy.
Milk	26	9	3	14
Air	22	11	5	6

B. *Operative treatment.*

1. *Operation following inflation.* — Advocates of inflation claim that in those cases in which inflation fails there is little or no difference in the patient's chances where laparotomy is resorted to, provided that operation follows without loss of time, cases in which actual damage to the bowel has occurred being excepted. There can be no doubt, however, that a patient stands a far worse chance when operated on after several inflations, chiefly owing to waste of time and several administrations of anæsthetic.

As there has been so little of immediate operation at Guy's, and those cases on which it has been practised have been unusually severe, we have had to consult other lists of cases than our own, to get an idea of the respective mortality in primary and secondary operation; by the latter term is meant cases which have been operated on after being inflated.

Mr. Eve's cases shew :—

	Cases.	Mortality.
Primary operation	26	77 %
Secondary „	44	79·5 %

The difference in mortality being practically inappreciable.

An abstract of Mr. Barker's cases shews :—

	Cases.	Mortality.
Primary operation	15	53·3 %
Secondary „	15	46·7 %

It is only fair to state, however, that several of the cases of primary operation were unusually severe. At Guy's, twenty cases have been operated on following distension of the bowel, and of these, seven recovered, the mortality being 65 per cent.

Six of these cases were inflated more than once, and of these, five died. This would indicate that although one inflation has little influence on the prognosis, a repetition materially raises the death rate.

As a matter of practical experience, it is found that inflation renders manipulation of the bowel much more difficult, particularly as regards replacement, which considerably increases the shock.

2. *Primary operation.*—The points in favour of primary operation have to a large extent been indicated. The chief point is that the condition of intussusception can be absolutely ascertained and appropriately dealt with, the patient being in the best condition possible under the circumstances.

At Guy's, up to the present, immediate laparotomy seems to have been resorted to, only in cases of great severity, and hence it is impossible to form an accurate opinion of its value, as this list will show :—

No. of Case.	Age.	Day of Disease.	Result.	Remarks.
1	6 mo.	4	Recovery.	Easily reduced.
2	4 mo.	4	Death.	Resection necessary.
3	16 mo.	3	Death.	Paul's tube inserted.
4	2 yrs.	14	Death.	Gut gangrenous and perforated. Resection.
5	7 mo.	4	Death.	Reduced.

Figures from other hospitals have been already quoted.

C.—*Expectant treatment.*—Although there are specimens of natural cure by sloughing in our own and other museums, the chances of recovery by such means are extremely remote.

Of five cases in present list which received no treatment, all were fatal.

Points shown by Reports.

Males, 36; Females, 22.

Only five cases exceeded two years in age.

Mortality: 29 died out of 58 cases.

There are four cases of hyperpyrexia in the series, all of which were fatal.

In seventeen cases the diagnosis was confirmed by operation on post-mortem examination.

Ileo-cæcal	...	...	11
Enteric ...	...	...	3
Ileo-colic	..	...	2
Colic	...	...	1

One patient showed both enteric and ileo-cæcal intussusceptions. Death resulted. Another showed invagination commencing in Meckel's diverticulum.

The tumour was felt in the rectum in twelve cases. This emphazises the importance of making a routine practice of rectal examination in these cases.

In many cases in which the diagnosis was doubtful, a definite conclusion was arrived at by administration of an anæsthetic, which rendered the abdomen flaccid and the tumour palpable.

Method of distension.—The child is fully anæsthetized, and the thighs well flexed in the abdomen.

Into the rectum a flexible tube, mounted on a handle about three inches long, is introduced. On the rectal tube is a rubber cushion ring, which can be lightly pressed against the anus by the operator, and the escape of the distending agent thus prevented.

When air is used, a bellows is attached to the side of handle, and air passes up the centre of handle into the rectal tube.

When fluid is to be injected, a funnel with about three feet of rubber tube replaces the bellows.

The fluid mostly in use is milk and water, at temperature 110° F. The fluid should be run in very slowly, with as little pressure as possible, never exceeding two feet of water. The operator places his hand on the tumour in abdomen and by gentle pressure on the advancing part may assist the pressure of the fluid.

More rough and ready methods that have been used in emergencies are inflation by household bellows and a large injection by means of Higgenson's syringe. Another somewhat novel procedure is injection by a soda-water siphon, of which we heard recently.

The amount of fluid injected should be limited to two pints.

Quiet should be maintained during the operation, as it is claimed that the peritoneum may be heard to crack in some cases before actual rupture takes place. In such an event it is needless to remark that operations should be immediately suspended.

Operation.—Unless the tumour can be felt definitely limited to one position in abdomen, and is quite small—in which case the incision is made directly over it—the incision should be made in middle line. The patient should be warmly clad and every precaution taken against shock.

The chief point is rapidity in operation and an early return to bed, with hot bottles applied and administration of stimulants if patient is collapsed.

In the Medical Wards.

CASES UNDER DR. WASHBOURN.

A CASE OF ACUTE HÆMORRHAGIC PANCREATITIS.

Eliza R., æt. 33 years, was admitted July 14th, 1901, for pain in the abdomen.

Her illness commenced at 11 a.m. on the morning of her admission with a sharp pain in the upper part of the abdomen, which was followed by vomiting. After vomiting three times within a few minutes, she brought up about half a cupful of bright red blood. She had never had any attack like it before. Menstruation had occurred regularly, the last period ending on July 6th.

On admission (4 p.m.) her temperature was normal, pulse 70 per minute, regular, but weak. She was a very stout woman and apparently in considerable pain. She lay on her back with her legs drawn up, and groaned continually. Her abdomen was very large, but she said it always was so. It moved very little with respiration. Liver dulness was present and the flanks were resonant. The abdomen was rather rigid and palpation caused pain, but the edge of the liver was felt near the umbilicus. No rub could be heard. The tongue and lips were rather dry. The urine was pale and acid and contained neither albumen nor blood. The respiratory and circulatory systems appeared normal.

She was thought to be suffering probably from a perforated gastric ulcer, and Mr. Lane was asked to see her in consultation.

An exploratory operation was undertaken (11.15 p.m.). The abdomen was opened in the middle line between the ensiform cartilage and the umbilicus. A quantity of dark-coloured fluid, evidently altered blood, was found in the peritoneal cavity, and numerous hæmorrhages were seen in the mesentery. No perforation was found in the wall of the stomach or other viscus. The pelvic viscera were normal except for a small ovarian cyst.

The patient became very collapsed during the course of the operation and died while the incision was being closed.

At the autopsy, fat necrosis and hæmorrhages into the subperitoneal fat and great omentum were found. There were also hæmorrhages into the head of the pancreas and around the head and tail and into the broad ligament. There was some dark blood-stained fluid in the peritoneum. The gall-bladder contained a few small calculi and the liver was large and fatty. The stomach showed an old cicatrized ulcer near the pylorus.

A CASE OF SUPPURATIVE PANCREATITIS.

Sarah D., æt. 40 years, charwoman, was admitted August 5th, 1901, for diarrhœa and vomiting. She was married and had had six children and the same number of miscarriages, the latter alternating with the births. Her youngest child was eleven years of age. She said her work was very hard and that she drank a great deal of tea and a moderate amount of beer, but never took spirits. She had had three severe attacks of rheumatism, but otherwise had always enjoyed good health. Her present illness began three weeks before her admission with stabbing pains in the left hypochondrium, and severe diarrhœa and vomiting. These symptoms had continued, and she had perspired freely and had several crops of "water blisters" all over her body. She had been treated by a doctor without obtaining relief.

On admission, her temperature was 99·4°, pulse 116, and respiration 20 per minute. She was a moderately stout woman of florid complexion, sweating freely with numerous sudamina scattered over the limbs and trunk. She seemed to be in some pain and groaned frequently. Her abdomen was full, but not distended; it was quite supple, moved well with respiration and was resonant all over. The liver dulness commenced at the sixth rib in the right nipple line and extended to the costal margin. What was thought to be the edge of the liver was felt as a moderately hard, thick and slightly everted ridge, running obliquely across the abdomen and reaching in the middle line a point midway between the ensiform cartilage and the umbilicus. A mass was indistinctly felt projecting two to three inches below the left costal margin, and was taken for an enlarged spleen. Palpation of the upper part of the abdomen, more especially in the region of the spleen, caused pain, but apparently not a great deal. The cardiac impulse was felt in the fifth space about half-inch internal to the nipple, and a very soft-blowing systolic bruit was heard in the mitral area. No adventitious sounds were heard in the lungs, and the resonance was normal. The calves of the legs were very tender, and no knee-jerk plantar reflex could be obtained; her pupils were very small but equal, and reacted to light. Urine sp. gr. 1012, acid; trace of albumen present; no sugar and no blood present. She was thought to be suffering from cirrhosis of the liver, and peripheral neuritis.

Farinaceous diet was ordered and the following mixture:—

℞	Liq. Bismuthi et Ammon. Cit.	...	ʒi.
	Sp. Ammon. Aromat.	...	miii.
	Aq. Chlorof. ad.	...	ʒi. t.d.s.

August 7th. The liver (?) was felt more distinctly, and the edge made out to be rather lower down and more irregular than had been thought before. The edge of the spleen was still more distinctly felt but it seemed enlarged; the pulse was still very rapid and soft, 98–120, and the temperature rose to 99·8°. The vomiting and diarrhœa were less.

8th. Temperature normal again; pulse 96–104. Vomiting continued, and the vomit was bile-stained.

9th. Frontal headache. Temperature 102·4°; pulse 120; respiration 30 (2 p.m.)

10th. Headache continued; vomiting and diarrhœa were worse. Temperature 102°; pulse 124; respiration 32.

℞	Acidi Hydrocyan. dil.	...	miv.
	Bismuthi Salicyl.	...	gr. x.
	Sod. Bicarb.	...	gr. x.
	Mist. Mucilag. ad.	...	ʒi. 4tis hor.

12th. She had a loose cough and brought up a quantity of greenish yellow sputum having an offensive smell. Impaired resonance below angle of left scapula, with consonating râles and faint bronchial breathing, moist râles and rhonchi heard elsewhere on both sides of chest. Skin hot, dry and desquamating. Temperature 103°, pulse 140, respiration 32.

℞	Ammon. Carb.	...	gr. v.
	Tinct. Nucis. Vom.	...	mv.
	Syr. Tolutani	...	ʒss.
	Aquam ad.	...	ʒi. 4tis hor.
℞	Musk	...	gr. v. 6tis hor.

13th. Patient died at 7 a.m.

The urine was examined daily while she was in the hospital. It was always acid, the specific gravity varied from 1016 to 1024, and except on the first day, when there was a small quantity of albumen present, no abnormal constituents were discovered.

At the autopsy.—The body and tail of the pancreas were found in a state of advanced suppurative necrosis, the head being apparently normal. The duct was traced from the duodenum into an abscess cavity in the tail of the pancreas. It appeared normal and no obstruction was found. The mesentery and lesser sac of peritoneum were much digested, and there was extensive fat necrosis in the great omentum. There were old adhesions between under surface of liver and large and small intestine. The liver was slightly enlarged, soft and fatty. The spleen was soft and there was recent capsulitis. There were numerous abscesses in the base of left lung, with diffuse areas of broncho-pneumonia. A subpericardial hæmorrhage was found at the back of the left auricle. The other viscera were normal.

CASE UNDER DR. SHAW.

A CASE OF ACUTE HÆMORRHAGIC PANCREATITIS.

James H., æt. 51, admitted into John on September 10th for stercoraceous vomiting.

He gave a history which seemed to indicate an attack of peritonitis two years ago. Apart from this attack he

had always enjoyed perfect health. His bowels had always been regular.

September 8th.—He had a breakfast at 8 a.m. consisting of beaten eggs and milk; before 11 a.m. the bowels were opened twice; at 1 p.m. without much pain he began to vomit, and during the afternoon began to have pain in the abdomen. He sent for a doctor, who sent him to bed and told him to abstain from food.

9th.—In the morning he again had abdominal pain. He took purgatives, but the bowels were not opened. The pain was relieved by the doctor's medicine. Vomiting was incessant, and the vomit was bitter and green. This condition lasted till 2 p.m. on September 10th, when the vomit was noticed to be stercoraceous. Between 2 p.m. and 11 p.m. (when he was brought to the front surgery) he vomited about a dozen times. He never vomited large quantities at a time.

On admission.—The abdomen was considerably and uniformly distended, but no distended coils of intestine could be seen. The abdomen moved with respiration, but not well; it was not rigid, nor was it tender except on deep palpation; it was resonant except in the right flank. He described the pain as having begun in the epigastrium, and as having afterwards spread to the umbilicus. At the time of admission pain was absent. Pulse 130 and bad. Respiration easy. Knee-jerks present. No blue line. Pupils small and reacted normally. No jaundice was visible by gaslight, but afterwards his skin was seen to be very sallow though there was no definite jaundice.

Temperature subnormal. His general condition seemed very good, for in the surgery he got off the couch, dressed himself, and wished to walk over to the ward. In the surgery he had vomited three drachms of dirty brown stercoraceous liquid. Rectal examination shewed a small quantity of fæces present; after an enema he passed three hard fæcal masses, each about the size of an index finger.

He was thought to be a case of acute intestinal obstruction. Mr. Steward operated. On opening the abdomen in the middle line a coil of small intestine presented, which was moderately distended. The condition of the patient was so bad that it was considered inadvisable to look for the cause of obstruction. A Paul's tube was being introduced into the gut when the patient stopped breathing. Efforts at rescuscitation were in vain.

At the autopsy the pancreas was found riddled with hæmorrhages. There was a considerable amount of fat necrosis, especially in the region of the pancreas. No hæmorrhage into the mesentery. There was no intestinal obstruction.

NOTICE TO CORRESPONDENTS.

The Editor wishes it to be understood that no communications can be inserted which are not guaranteed by the name of the sender. All articles must be written on one side of the paper only.

Sport.

Guy's Hospital Lawn Tennis Club.

The first team have had, on the whole, a fairly successful season, though it must be allowed that the teams met were not so strong as usual. Of nine matches played, six were won, two lost, and one abandoned in an unfinished condition, four matches all. In the inter-hospital competition, the team made a poor show, but had the misfortune to meet the winners, St. Thomas', in their first match. Next year it is hoped that rather stronger clubs may be played. The second team were not equally successful, but this was partly owing to the difficulty of getting a team to play regularly, for which the variation of the first team was mainly responsible Eight matches were played, of which three were won and five lost; several other fixtures had unfortunately to be scratched.

Good entries were obtained for the club competitions. The championship was won by T. C. Lucas, who defeated E. N. Jupp, who has held the Cup for two years, after an exciting match, the scores being, 3–6, 6–1, 7–5, 3–6, 8–6, all five games being necessary. The handicap singles were won somewhat easily by A. Zorab, 15, who defeated T. A. Chignell, owe ½–15, in the final. There were twenty-eight entries for this competition. A definite result has not yet been arrived at in the doubles, for which there were nineteen pairs entered, the rain at the end of July preventing this competition from being finished before men began to go away.

Notices.

GUY'S HOSPITAL MEDICAL SCHOOL.

GORDON LECTURESHIP IN EXPERIMENTAL PATHOLOGY.

Applications are invited for this vacancy, the duties of which commence on January 1st, 1902. Applicants will be required to undertake not to engage in private practice during tenure of the Lectureship.

Salary with fees will approximately amount to £250 per annum. The particulars of the duties may be obtained of the Secretary of the Board of Electors of the Gordon Lectureship, Guy's Hospital, London, S.E.

Applications must be sent on or before November 16th, 1901.

FELLOWSHIP EXAMINATION, NOVEMBER, 1901.

The November examination for the Diploma of Fellow of the Royal College of Surgeons of England will be held as follows:—

Written papers—

Primary examination: Thursday, November 7th, and Friday, November 8th.

Final examination: Monday, November 25th.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

A Protest.

DEAR SIR,—I must take exception to a paragraph in your notes on Glasgow in the last number of GAZETTE, viz., "The city of all improvements is by no means in the van as regards aseptic surgery." If your correspondent had visited the Western General Infirmary where Professor Macewen holds the post of surgeon, he could hardly have written these words. He would have seen the three theatres which were built by enthusiastic admirers of this great surgeon for his work. Had he been fortunate enough to see Professor Macewen operate as I have, he would have seen that there is no more rigid adherent to the aseptic system than may be found in Glasgow.—Your obedient servant,

FREDERIC VICARS,
London. M.D. Brux.

Bermondsey Settlement.

DEAR SIR,—At this time when many new students are coming up to Guy's Hospital, will you allow me, as in some previous years, to call attention in your columns to the fact that there are vacancies for a few additional residents at the Bermondsey Settlement, Farncombe Street, Jamaica Road, S.E., of which I am Warden.

The Settlement is within easy reach of Guy's Hospital, and affords to medical students many opportunities of becoming familiar with the social problems of poorer London without involving too much distraction from medical studies. Some years ago Professor Macalister, of Cambridge, pointed out in a speech at Guy's Hospital, on behalf of the Settlement, how valuable an element in medical training such opportunities were.

Our general appointments are good and our terms reasonable. I shall be glad to furnish further information to anyone who may write to me.—Believe me, dear sir, yours faithfully,

J. SCOTT LIDGETT.
September 5th, 1901.

Nurses' Dining Hall.

DEAR SIR,—Gratitude runs high amongst the nurses for the kindly interference of some unknown friend, who has spoken the word in season about the food in the nurses' dining-hall. Things certainly have improved, and the murmurs, which at one time almost amounted to threats, have ceased, though there is still room for further improvement. We must be thankful for what we have received.—Yours sincerely,

"L. G."

A Suggestion.

DEAR SIR,—It is sometimes found advisable in cases of injury or otherwise to remove one of the digits through the proximal phalangeal joint, even through the proximal phalanx itself. In such cases it is of supreme importance to ensure if possible the complete power of the flexion and extension of the stump. I find in the surgical text-books various devices mentioned for this purpose, but I have not noticed the following simple plan. In one or two cases, where I have carried out this operation, I have cut one or other of the tendons rather long (either the extensor or flexor tendons, as seemed the more suitable), and united these tendons by a silk suture over the end of the bone. In each instance, when I have done this, I have found that subsequently there resulted early and complete power of extension and flexion of the stump. This simple procedure may have been frequently adopted, but I do not think I have seen it previously mentioned.

H. PORTER BERRY,
The Priory, Grantham, M.B., M.R.C.S.
August 23rd, 1901.

Nursing News.

MATRON'S OFFICE.

On September 1st, Miss M. B. Wood, Sister of the Isolation ward, left the hospital, and shortly proceeds to East Africa to take up an appointment under the Colonial Nursing Association.

On August 29th, Nurse Simpson, head nurse in Stephen ward, left the hospital after more than four years' service, and Probationer Corder was appointed to succeed her as head nurse in Stephen.

On September 1st, Nurse L. Mallandaine left the hospital, having completed her three years' training.

On September 1st, Probationer Lavy was appointed to succeed Nurse Park as head nurse in Mary ward.

On September 9th, Nurse M. W. Cooper left the hospital on completion of her three years' training, to take up Colonial nursing, and Probationer Bryan was appointed to succeed her as head nurse in Charity ward.

On September 10th, Nurse Hindley, head nurse in Stephen ward, left the hospital on completion of her three years' training, to take up her duties on the staff of the Private Nurses' Institution, and Probationer Conolly was appointed to succeed her as head nurse in Stephen.

Passim.

It is very pleasing to note the names of a number of Guy's nurses and men among those mentioned this week by Lord Roberts in his report. Miss Fisher, Superintendent at Deelfontein, and Miss Davison, the present Sister Cornelius, are among the fortunate ones, as are Messrs. E. T. E. Hamilton, Denyer, and R. O. Moon. To all we offer our heartiest congratulations.

At the last Meeting of the Members of the Court of the Worshipful Company of Barbers, Dr. Tanner, an old Guy's man, was elected Master. The honour is a great one, for the list of previous Masters contains names of men of very high reputation and distinction. It is curious that there has not been a surgeon or physician Master of the Company for 156 years until the election of Dr. Tanner.

A propos this election, a few facts on the history of the Company of Barber-Surgeons may be of especial interest. It appears that the Company was incorporated by King Edward IV., in 1461, under the title of "The Mystery of Barbers." It has been remarked that this title would imply that at that period of the two professions that of barber was considered the more respectable. Jaques Fries, physician to Edward, and William Hobbs, "physician and chirurgeon for the same King's body," were the prime movers in starting the company. Although surgeons and barbers were united into a corporate body in 1540, those practising shaving were forbidden to practice any surgery, beyond extracting and letting blood. In 1745, however, the Company divided, the surgeons moved into a new hall in the Old Bailey and afterwards into the Royal College in Lincoln's Inn Fields, whilst the barbers continued in their hall, where Pepys records in his diary how he enjoyed "a fine dinner and good learned company, many doctors of physique," he also seems to have been much impressed by "a gilt cup, given by Henry VIII., with bells hanging at it, which every man is to ring by shaking, after he hath drank up the whole cup;" besides the cup the Company has in its possession other pieces of old plate and historic pictures by Holbein, Van Dyke, and other great masters.

In the *Jewish World* of August 30th an interesting article appears under the title of "What the Jew has done for Medicine." The first part of the paper deals with the excellent hygienic law recorded in Leviticus. The rules laid down on such subjects as the preparation of food, the isolation of leper, and the destruction of infected articles by fire, show what an important subject was the public health, even in those early days, and the rules for its maintenance form the basis of all such regulations for centuries that followed. It is claimed that Moses, to whom these regulations for the weal of the state are attributed, owed his knowledge to the Egyptians, who were already skilled in various branches of medicine. It will be news to many that medical reports were kept at the Temple of Memphis, and could be consulted by students.

The article goes on to trace the history through the early centuries of the Christian Era. One, Samuel, a physician, living in the third century, is recorded as having used an eye-wash with extremely satisfactory results on a Rabbi. Another physician, Rav, a contemporary of Samuel, made dissections of the cadaver, but his conclusions do not appear. In the formation of the great medical schools of the Latin countries, the Jews played a prominent part, and many of them figured as professors, and have done so up to the present time.

While on the subject of the history of medicine, it is a fact to be deplored that, to the vast majority of men, it is a sealed book. Members of all other professions, the education of whom we are perhaps too ready to criticize, learn something of the rise of their profession and the men to whom the credit of it is due. This is as it should be; but unfortunately it is not so with us—that is, speaking for the majority. Even Hippocrates, Galen, and other giants of

early years, are known somewhat vaguely as the "Fathers of Medicine," further knowledge being extremely limited. It appears that unless a man has his name attached to a disease by his friends, that it will be unknown in the land at a comparatively short time after his death, and that even if his name survive, little will be known of his work.

THE chief reason of this is that, if there is a book on the subject of a reasonable size, it is practically unknown. We feel sure, however, that were such a book to be had, there would be many who would hail it with delight. Be it far from us to suggest another subject for examination; but there comes a time to most when they feel disinclined for real work, and, at the same time, the prick of conscience for being idle. At such a time a study of the history of medicine would be a useful compromise.

IT is rumoured the Commission appointed to enquire into the grievances of the R.A.M.C., and to formulate suggestions for remedy, will shortly issue a report. At such a time the experiences and views of Mr. Scot Skirving, Consulting Surgeon to the Australian Contingent, may prove interesting, seeing what chances he had of criticism. The chief fault he finds with the Service is the defective system of training. He also considers that military titles should not apply to military men as is now done, it being derogatory to the dignity of our profession. To remedy the shortcomings of the present system, he suggests that either frequent leave for study should be granted to members of the R.A.M.C. or that they should be so trained that in time of war they should act solely as organizers and the whole of the medical and surgical work should be dealt with by civilians.

HE upholds the "fly-borne" theory of enteric very strongly, and in stationary camps attributes a large number of the cases to such a cause, particularly as in many places the sanitary arrangements were badly planned. Premature shifting of sick and wounded men he considers was an existing evil very much in evidence. Beside dealing with the subject which caused so much discussion in the early part of the war, Mr. Scot Skirving deals with such complicated and difficult questions as the training of combatant officers and tactics. The title of the book from which these statements are drawn is "Our Army in South Africa."

A NEW structure is being put up on the Philip balcony to provide shelter from rain, whilst in no way hindering the abundant supply of fresh air, so it will not be long before a few cases of phthisis are being systematically treated on the "open air" principle. We also understand that a scheme for adding a balcony to Mary ward is now under active consideration. We have heard it alleged that this is a dangerous step; the alarmists would persuade us that the thin edge of the wedge having been introduced, it will not be long before Guy's is turned into a sanatorium, the work for which the hospital is primarily intended being neglected. Like the poor, some cases of phthisis must always be with us, and it seems only right that they should be given the benefit of this well-proved treatment. The two successful cases recently published in the *St. Thomas's Gazette* prove that even London air, despite its fogs and dampness, can work wonders in desperate cases of tuberculosis; and apart from tubercle, the convalescence of patients from other diseases is greatly hastened by easy access to fresh air. As a result, the beds will be occupied for a shorter time, and the total amount of work done by the hospital considerably increased.

THERE are so many unavoidable noises and other interruptions to a night's rest in the College, that any cause of disturbance should be prevented if possible. Men who go to bed early with the idea of getting a long night are disturbed by later comers closing their doors in the manner usually employed by railway porters. The noise occasioned is not limited to one corridor, the acoustic properties of the College, for which it is so justly noted, enabling it to be heard with great distinctness all over the building. This nuisance is simply due to thoughtlessness, and it only needs to be mentioned to be discontinued.

THE annual dinner of the Students' Club will be held on October 1st, at 7 o'clock, Dr. Pye-Smith filling the chair. As many men were disappointed in applying late for tickets last year, we are asked by the Secretary, Mr. A. W. Ormond, to state that applications should be made early. Tickets, price 3s. 6d., exclusive of wine, may be obtained of the Secretary or the Stewardess.

WE must congratulate T. A. Chignell on the honour conferred on him by the selection committee of Hampshire in choosing him to represent his county at cricket. Next year we hope to see him occupy a more prominent part in hospital cricket than he has done in the past year.

THE next issue of the GAZETTE will be the Student's double number, which is always published at the commencement of the Winter Session of the Medical School. We would, therefore, take this opportunity of impressing on the captains of the various teams the importance of sending us in their appeal urging on all newcomers the necessity for coming forward and offering their services.

From the Gazette's Special Pathologist.

ALL specimens—particularly those of solid tissues—should be accompanied, if possible, by a short clinical and post-mortem history, and a postal order for 2s. 6d. An extra charge of 6d. per slide is made when prepared sections are to be forwarded.

Diphtheria specimens are to be labelled *Immediate*.

Postal Orders to be made payable to Mr. C. H. WELLS.

NOTICES.

J. H., CHELTENHAM.—This is a very soft carcinoma of the breast, and large areas of the growth have undergone caseous degeneration.

H. A. C., SAXMUNDHAM.—The tissue elements of the sputum consisted of pus corpuscles, red blood discs, and large numbers of squamous cells from the pharynx. No columnar or alveolar epithelium from the respiratory tract was detected, nor could any fragments of growth be found. The tubercle bacillus was not present in specially stained preparations.

H. G. A., NOTTINGHAM.—This specimen of sputum contained a fair number of tubercle bacilli.

PATHOLOGIST.

Cerebral Localisation.

A paper read before the Guy's Physiological Society by H. F. BELL WALKER.

GENTLEMEN,—The human cerebral cortex is calculated to contain about 1,200 million nerve cells. Add to this the fact that each cell is in physiological continuity, not with one or two other cells but with many, and we get some rough idea as to the possible channels by which an impulse might travel.

I trust, then, you will temper the asperity of your criticism on what follows by keeping in mind this fact.

Until about thirty years ago the current notion was that when the brain acted it acted as a whole, so that when any part of the cortex was destroyed all the functions under the control of the cortex were affected, the loss of control being proportional to the area of cortex destroyed. This view, which we now know to be erroneous, was based chiefly on pathological evidence. It was noticed in post-mortems that there were often extensive lesions of the cortex, yet during life the subject had exhibited little or no sign of cerebral inefficiency. Therefore, they argued, there cannot be any localisation in the cortex because a definite lesion does not result in a definite loss of function.

Such a conclusion makes no allowance for the wonderful power of adaptability which we know living tissues to possess, and if from any cause a portion of the cortex be rendered functionless, there is every reason to believe that its work may be performed vicariously by cells of another locality.

As we might expect, the power of making fresh connections is greatest in the child before many of the cells are fully grown and connections firmly established. This conclusion is borne out by the fact that children are more likely to recover from effects due to loss of some part of the cortex than are adults.

Hughlings Jackson, who studied unilateral and limited epileptiform convulsions, advanced the hypothesis that they were due to irritation or discharge of certain convolutions of the opposite hemisphere functionally related to the corpus striatum and muscular movement; and although he brought forward many arguments in support of this conclusion his views were not generally accepted because physiologists had hitherto failed to show that the cortex responded to mechanical, chemical, thermal, or even to electrical stimulus. The alternative method of destruction was also thought inapplicable to the cortex; so that while great progress was made in the study of the peripheral nervous system, little or no advance was made in the study of the functions of the cerebrum.

In 1870, however, Fritsch and Hitzig published results of experiments obtained by applying blunted electrodes to the surface of the hemispheres of dogs, employing a stimulus from the opening, closing or commutation of a galvanic pile of sufficient intensity to cause a perceptible

sensation when applied to the tip of the tongue, and they showed that when the stimulus was applied to certain regions of the cortex movements of the opposite side resulted.

These results were much extended, especially by Ferrier, who worked in a similar way, only he employed the induction coil and he incidentally pointed out that failure to obtain results might be due to hæmorrhage or narcosis, which diminished the excitability of the cortex, deep anæsthesia abolishing the excitability altogether.

Criticism, however, was soon forthcoming, and it was shown that by removing the cortex and stimulating the fibres below that similar reactions were obtained. There was, it was said, physical conduction to the base of the brain.

But the application of very strong stimuli to degenerated fibres four days after the removal of the cortex, produced no response whatever, a fact in itself completely disposing of the physical conduction objection.

Still it might reasonably be urged that the application of electrodes to the cortex stimulated not the cells but the subjacent white matter, just in the same way as a stimulus applied to the skin will produce a response from a subjacent nerve. That the cells are indeed excitable is proved by the following considerations:—

1. It requires a stronger stimulus to get a response from the direct application of electrodes to the medullary substance than to get one from the cortex.

2. The reverse, however, is the case if the animal be deeply anæsthetised.

3. Stimulation of the cortex is preceded by a latent period of ·045 sec., while in the case of the medullary fibres the latent period is only ·030 sec.

4. Clonic convulsions follow repeated stimulation of the cortex, which tend to spread and become generalised. Such spasms never follow direct stimulation of the medullary substance if the precaution of removing the centres from *both* sides be taken.

5. The muscular response is not the same in both cases. In stimulation of the medullary fibres the muscles contract more quickly, and the contraction is of shorter duration.

6. The effect of localised destruction of the cortex is complementary to that of irritation.

Ferrier also used the method of destruction or ablation. If stimulation of a given region of the brain results in a definite movement, removal of this region should paralise this movement but no other movement.

To avoid discrepancies two conditions must be observed; the shock resulting from the operation must be allowed for, which, however, if the lesion is not great soon passes off; and also care must be taken to prevent the primary lesions from becoming foci of inflammatory processes.

Before the introduction of antiseptic surgery this could not be done, consequently the animal could only be kept under observation a short time, because if left longer it was impossible to be sure how far neighbouring regions were involved, but by employing antiseptic methods the injury can be rigidly confined to the seat of the primary lesion.

There are, therefore, two ways of localising centres in the cortex, stimulation and ablation, and by the aid of these methods fairly concordant results have been obtained by different experimenters. Further, the results obtained in monkeys receive support from pathological conditions observed in man.

We have now to discuss the significance and arrangement of localisation.

The nervous system of a man consists of a central axis from which nerves pass to all parts of the body.

The roots taking origin from this axis contain fibres which convey both afferent and efferent impulses, and we notice that the fibres which supply sensation to any part enter the central system close to the point from which emerge those which control its movements. Thus the parts to be controlled are most directly under the influence of impulses arising in their immediate vicinity. This fact reminds us of the primitive segmental condition of the central nervous axis in which state of affairs both sensory and motor nerves of any given segment are localised in the corresponding segment of the central system.

If, then, each nervous segment controlled the tissues of its own segment efficiently, what is the significance of those larger masses of nervous tissue which do not show a segmental structure nor possess such direct or immediate connection with the various organs of the body?

By studying the evolution of the mammalian central nervous system we arrive at the conclusion that there is a strong tendency to break down the initial segmental arrangement by condensation, so that groups of centres might mutually control each other and at the same time be brought under the influence of the special senses. It is from considerations of this nature that the ideas of localisation have developed.

Embryologically, it is very probable that the larger masses of the encephalon are the homologues of the dorsal horns of the cord, and we have to consider how in these regions pathways for afferent are related to pathways for efferent impulses.

First as to the topographical arrangement. The spinal cord has thirty-one pairs of nerves, conveying both afferent and efferent stimuli. Within the cranium there are twelve pairs of nerves, six predominantly afferent and six efferent in function (first and second though chiefly afferent do contain efferent fibres).

Now let us consider the relation of the motor nerves of the cord to the muscles of the limbs which they innervate. The same muscles may be thrown into contraction by stimulating more than one root, and it is found that the nuclei in the cord corresponding to these roots extend through several segments of the cord. Further muscles requiring fine adjustment, such as those governing the extremities, have extensive nuclei in the cord. The advantage of this extension is twofold, for not only are the muscles dominated by a larger number

of efferent cells, but the nuclei spreading through several segments are brought under the influence of more diversified incoming stimuli, increased refinement of muscular movement thus being obtained.

With regard to the distribution of afferent fibres, there is less exact knowledge, but two relations are well established: first, that by way of afferent fibres impulses may directly affect efferent nuclei; second, stimuli entering by the same channels may affect the efferent nuclei via the cerebral hemispheres, usually via that of the opposite side.

The principal path for impulses to reach the higher centres is either along the dorsal column of the same side as far as the lower end of the bulb, where the impulses having passed to a new set of cells cross the middle line and terminate in the corresponding hemisphere, or by the lateral column to the cerebellum and thence to the hemisphere of the other side.

The motor nucleus extended through a few segments is centralisation compared to the sensory pathway which spreads itself out over a large area of the central system. The cranial nerves, too, so far as they are sensory, have a primary nucleus at the point where they enter the axis, and from these primary centres they establish secondary crossed connections with the hemispheres by the intermediation of central cells and their processes. In lower vertebrates where cephalisation is but little advanced, the primary centres, when alone present, are sufficient to guide the animal. Thus, a frog with its hemispheres removed is able to guide its movements by visual impressions, whereas in man connections for such a co-ordination are situate in the hemispheres, a primary connection being impassable or even absent. Thus, in higher forms it appears that the incoming impulses, instead of passing over to centres which discharge downwards, pass to a group of central cells which carry impulses to the cortex, while the lower pathway tends to become more and more impassable.

In this way the function is transferred to a higher region, though what influence determines this growth of central cells is obscure. In short, we may say that cephalic development is the outcome of two factors, the tendency of afferent impulses to diffuse, and the withdrawal of immediate outward discharge from the lower centres.

Incoming impulses, both from spinal and cranial nerves, enter the hemispheres through the internal capsule, chiefly through its occipital part, but probably also to some extent throughout its whole length, because the fibres bringing afferent impulses end near cell bodies which control centres for related muscles, and also because the grouping of fibres in the capsule is similar to the grouping in the cortex.

By this device a large area of the cortex receives impressions and an equally large area contains cells giving rise to outgoing impulses, so that we see in the cortex a turning point quite analogous to a simple spinal reflection, and since in the cortex the reflections are spread over a large area, it is particularly adapted for the study of centres.

Granting this, it follows that so far as the cortex responds to stimulus its entire area is motor, and this close association between sensory and motor elements brings it to pass in the case of regions devoted to special senses that the immediate motor reactions which result from stimulation of these areas, occur in the muscles immediately in connection with the corresponding sense organs.

For the great mass of muscles, however, the skin is the sensory organ, and since the mass of muscles directly in connection with this sense is much larger than those in connection with the special senses, there obtains in the regions devoted to these muscles a preponderance of outwardly discharging cells, so that these regions have come to be designated motor in contrast to other regions where afferent elements are in a majority. Still it is convenient to employ the terms sensory and motor areas, but we must bear in mind that by such terms we imply the more obvious rather than the exclusive function of the region in question.

If we compare the motor region of the monkey, ape, and man, we see that although they are relatively in the same position in all three cases, there is in the ape, and so far as is known in man, too, a tendency to condensation, the excitable areas becoming smaller and at the same time cut off from neighbouring areas by cells which induce no evident response to stimulus, but with this limitation homologous regions govern the same functions in the different animals, the motor regions in all cases being grouped round the central fissure, the head and neck areas lying most anteriorly, those for the leg most posteriorly, while the arm and trunk areas occupy an intermediate position.

Each motor area may be further divided into flexion extensions and an intermediate confusion region; for example, in the arm area it is flexion, confusion, extension from above downwards.

The cortical areas do not usually control individual muscles, but groups of muscles, in such a way that stimulus applied to them results in co-ordinated movement, so that in the passage of the cortex impulses are modified and toned to meet requirements, and as we might expect the size of the cortical area depends not on the mass of muscle controlled but rather on the amount of refinement required. Thus, it is that the tongue, lip, phonation thumb, finger, and other areas governing the more delicate movements are disproportionately large, for such refined movements will require many associations which may be the cause of these areas being so extensive.

It is also necessary in many delicate movements that fibres of the same muscle should contract to a different extent. All this will require an anatomical arrangement for distributing the impulse which calls forth the movement. Why in man the motor areas should be smaller and more isolated does not seem quite clear, for we

cannot say that a man has less delicacy of movement than a climbing monkey except perhaps in the legs.

Possibly the explanation is that in man more elements concur in the associative function whereby distant centres are brought directly into touch and impulses given a much greater "choice," so to speak, of efferent channels.

Hitherto I have only spoken of the efferent cortical discharge as being called forth by impulses directly arriving in the immediate neighbourhoood of the efferent cells, but we know that an impulse started in any sense organ may affect any efferent group of cells.

This is what is meant by association. Thus, a visual impulse may be the immediate cause of a movement of the leg say, the two centres though localised at different parts of the cortex being brought into connection by association fibres. The example given is, of course, only one among many such relations, and we may be sure that the more complex an animal's reactions are, the more generally are the various centres connected.

We have also to imagine that the incoming impulse diffuses into many regions, yet the response may be confined to one channel. This power of guiding impulses into appropriate channels is very mysterious, for potentially at least we must admit of general connections, for in strychnine poisoning, for example, we know that a very slight stimulus applied to any sense is sufficient to cause a discharge along all motor channels, and this even without the intervention of the cortex.

I cannot help thinking that the nature of a discharge depends on what the motor-cells are doing when they receive an impulse, for it is clear that the cells at one time receiving impressions along five channels say, and at another along ten, will respond differently under the different conditions.

Besides forming pathways for incoming impulses afferent elements have another function, for on them depends the full and final development of the cortex, and without going into this fundamental principle of education, I may state that there are plenty of cases to show that development of the cortex has been more or less modified as the result of interference with incoming impulses.

Fibres from the efferent cells of the cortex also pass out by way of the internal capsule, and that man has proportionately a greater number of such fibres than other animals, and also that the delicate adjustments of the arm require more fibres than the coarse movements of the leg, is not surprising. The position of fibres in the internal capsule, both with relation to the rest of the brain and to one another, is very constant, the degree of localisation being just as exact in this position as in the cortex itself.

Just as the afferent fibres end in the hemisphere of the opposite side, so do the efferent fibres come into relation with outwardly discharging cells of the opposite side, the bulk of the fibres decussating at a somewhat lower level than the sensory. The usual teaching is that the projection fibres of the cortex affect directly the anterior cornual cells, but it is not unlikely that they do this only through the intermediation of the cells of Clark's column. With regard to the so-called sensory areas, I can only mention one, and that the most debated, the tactile centre. It has been asserted, notably by Munk and Mott, that when the motor cortex is destroyed, hemianæsthesia results. Schafer, however, denies this and says that if the whole motor cortex be removed in a monkey, cutaneous sensation is not affected beyond what can be accounted for by the alteration in tone of the subjacent muscles. Also in his isolation experiments paralysis was as complete as when the centre was completely removed, a fact which seems to show that the motor cells do not receive impressions direct from lower centres, and therefore not to be considered sensory. The area given to tactile sense is the limbic lobe which we may notice is immediately subjacent to motor areas, and we may well imagine how difficult it must be to remove this portion of the brain without injuring adjacent structures, and it seems that in Schäfer's experiments the motor areas were injured, for it was shown by Franco that in the six of his monkeys, which were examined, from which the limbic lobe had been removed, that there were a considerable number of degenerated fibres in the pyramidal tracts, clearly indicating injury to the motor cells.

It is not improbable that the reason why motor disturbance is much more marked than anæsthesia, as the result of ablation of the motor cortex, is due to the fact before stated, that sensory impressions tend to diffuse, so that when a portion of the motor cortex is removed afferent impulses readily find other channels, whereas the motor cells being in very direct communication with the muscles paralysis is very marked and permanent.

Pathological evidence, too, is very strongly in favour of the Rolandic area being sensori-motor, and looking at the subject broadly, comparing if with analogous cases, and keeping in mind the manner in which cephalisation has been brought about, I think we ought to hesitate before removing the tactile sense from the neighbourhood of the motor cells. How intimate a connexion between the skin and muscles exist, is shown by the experiment of cutting the posterior root only of the nerve going to a limb, loss of voluntary control of the more refined movements of the limb resulting, showing that associations from other senses are not sufficient to adequately govern the motor cells without the aid of tactile and muscle sense.

With regard to the inexcitable areas very little is known. Extirpation in the frontal region is said to shorten the time of reflexes.

That the frontal lobes are the seat of psychological processes has not much real support. Indeed, the facts are rather the other way. For example, the American crowbar case, and examination of the brains of men of great mental capacity, where the parietal and not the frontal lobes were the most increased in size.

Considering how complete the connection between the hemisphere and the opposite side of the body is, it is somewhat surprising to find that, after total removal of

one hemisphere in dogs, both halves of the body may come under voluntary control of the remaining hemisphere. This relation is not readily explained, for we can be by no means sure that the way impulses pass in the system after the operation is the only one by which they normally pass, for the central system gives evidence of possessing supplementary channels. It appears that the pathways by which one hemisphere can control the whole body are crossed connections between the necessary lower centres of the cord. These crossed connections seem to be much more perfect in the case of associated movements, such as phonation, the control by one hemisphere being more complete in such cases than where symmetrical groups of muscles do not usually react together.

This suggests the relative importance of the two hemispheres. It would seem that in ambidextrous people the hemispheres are more nearly equal than in one-handed persons, right-handed people being left brained and vice versâ.

Aphasia is, perhaps, the best example of this. There is not any evidence, however, that the dominant hemisphere is any heavier than the other, nor is it known that there is any anatomical basis for this tendency towards onesidedness.

Starting from the simple reflex where the relation between cause and effect is perfectly clear and developing the possibilities by increasing the number of cells and connections, then we may see in the human brain not an automatic apparatus which of its own accords sends its fiats to the uttermost parts of the body, but a complex machine which is kept in motion only from without. Yet so many are the connections, so susceptible and receptive the elements, that we cannot foretell with any degree of certitude how the individual will react to his senses.

Reviews.

The price of books submitted for review should in every case be stated.

Practical X-Ray Work. By F. T. Addyman, B.Sc. Lond., F.I.C. Published by Scott, Greenwood & Co. 7/6.

This is a much-needed treatise on the physical side of X-ray work written by one who is evidently a thorough and up-to-date scientist.

The writer has the exceptional gift of serving up old matter in a new and palatable form, and the chapters on electrical terms, sources of energy and coil construction, which, though not new in matter, are distinctly new in treatment, read with a freshness that holds the attention. It is on account of the very high standard of the scientific portion of this work that disappointment is felt in the manner in which the art of radiography is treated. It is at once apparent that the writer has not read or seen all, nor does he seem familiar with many well-known and useful facts connected with his subject. For example, he states that there is no other method of using the alternating current for radiography or battery charging save by driving by it an electro-motor and dynamo or by the use of an asymetric cell. This is singularly inaccurate, and mention need only be made of three rectifiers of different design shewn by their inventors at the March meeting of the Rontgen Society, of which the author is a member. These three instruments, designed respectively by Dr. Batten, Dr. Morton and Mr. Marshall, all satisfactorily converted alternating into direct current, and from experience we can speak highly of Dr. Batten's system, both from the point of view of initial outlay and economy in working. It is a serious matter when the author of a text-book that is bound to become largely used omits to mention such a system as Dr. Batten's, for the alternating current is supplied so universally that many medical practitioners could charge their batteries or run their X-ray coils in their own houses if they were told how.

In discussing the relative position of patient and tube, the writer says that the practice of placing the tube beneath the patient and the couch is a continental one! If he will but walk into Guy's, the London, Netley, Haslar or Brompton Hospitals, and possibly many more, he will see this system in daily use, and there is reason to suppose that the example of this country has been followed by others. It has been the only system at Guy's for the last four years. His remarks, too, upon the necessity of some apparatus for rigidly holding the plate are quite incorrect. The plate is simply laid upon the part viewed and covered by the screen so that the operator sees, during the exposure, whether the placing of the subject is good. Surely few will not admit that this system is the safest, most convenient and satisfactory of any, and yet it is passed over as a quaint continental custom!

Apropos of this we give the author's description of methods for renal examination as being likely to lead to the most erroneous results in this important branch of X-ray diagnosis. The patient lies upon his back and is instructed to take a deep breath, the plate being presumably under his lumbar spine and the tube above him. The current is turned on. When the patient has held his breath as long as possible, he must make a signal with his hand, the current is then turned off. He breathes once or twice then inflates his lungs again, and a further exposure is made. Thus the whole phase of the exposure is made in the same phase of respiration.

An automatic apparatus is sometimes used, which consists of a lever, one end of which is fixed to the patient's chest, whilst the other end is connected with a mercury switch. Each time the lungs are inflated contact is made and the coil works. At expiration the coil is not working.

What about one of the most essential items in the search for a renal calculus, the screen examination? What of the discomfort to the patient of lying upon a

glass plate, and the other obvious disadvantages? What of the arrangement of the tube which can only be decided upon by a careful screen examination and a slight variation of which may quite defeat the end in view?

These are all questions which need careful consideration by anyone who is desirous of being accurate in renal diagnosis with the Rontgen rays. Then this system suggests a terribly protracted exposure, and turning to page 177 we see confirmation of this suspicion.

"An arm requires one minute in a child to four minutes in an averaged-sized man, and a leg below the knee will require about the same." Abdominal and pelvic exposures are given varying from four to thirty minutes! These exposures are preposterous, and with good modern apparatus no exposure in any region need exceed one minute. In the Guy's Hospital skiagraphic department it rarely exceeds thirty seconds. This diminution in exposure-time is one of the greatest of modern advances, and it is of great importance that the fact of its existence should be made universally known to the profession that the bugbear "dermatitis" may be known to be one of the rarest of accidents.

When treating the subject of localisation, the writer deals at great length upon photographic methods, and refers to screen methods as not being accurate. This is a mistake. The system used in the Guy's Hospital skiagraphic department for the past few years, where the patients average 1200 a year, is a screen method alone, and has never to our knowledge been known to fail. It is accurate to a millimetre, and suitable for all foreign bodies wherever situated, save those in the eyeball, in which cases the Davidson localiser is so suitable. This system has been described often. It was first published we believe in the Archives of the Rontgen Ray in 1896 in the Guy's Hospital Gazette, the Clinical Journal, the Physician and Surgeon, shewn to the Clinical Society of London, and published in the transactions of that society, and is in the present number of the Guy's Hospital Reports,

Certain inaccuracies in the subject of tubes need mention. The *soft* tube is on one page stated to be the fastest photographically, and upon the next the high tube. In the chapter on "teeth" much space is wasted in the discussion of suitable rubber in which to wrap the film before introduction to the mouth. Most varieties are found to be opaque. If the author will discard rubber and use waxed paper, such as is used for making negative envelopes, he will find a solution to the difficulty.

The illustrations throughout are excellent.

It is to be hoped that in the next edition of this work, which should not be long in coming, that a thorough revision will be made of the radiographic portion and the more modern and satisfactory aspect of this valuable aid to diagnosis be shown.

A Manual of Medicine. Edited by W. H. Allchin, M.D. Lond., F.R.C.P. F.R.S. Edin. (Published by Macmillan & Co.) Vol. III., price 7s. 6d. net.

This volume, the last but two of the work, maintains the standard of the two previous volumes.

After a short introduction upon the General Anatomy and Physiology of the Nervous System, by Dr. Sherrington, follow articles upon the different diseases of the brain and its membranes; the spinal cord and its membranes; the peripheral nervous system; upon functional diseases of the nervous system; upon muscular dystrophies; and upon trophoneuroses. These, as before, are by different authors, chosen from among the younger physicians at various hospitals; and each is terse and very readable.

In a volume of this size it is necessary to be brief; in consequence, some of the chapters are less detailed than might be wished. One point the authors are to be congratulated upon, namely, that they have seldom burdened the reader with elaborate statistics. These are necessary in a large book of reference; but in a Manual they are irksome.

As before, the question of Therapeutics is very shortly dealt with. In previous volumes this was still more evident. In the present instance, unfortunately, the shortness of the paragraph headed Treatment is almost unavoidable; for in so many diseases of the nervous system drugs can only produce little benefit.

There are numerous illustrations throughout the book; the reproductions, from microphotographs, of transverse sections of the cord showing various degenerated tracts, are among the best. The four coloured plates of the fundus oculi, copied from Adams Frost's Ophthalmoscopic Atlas, are those most useful to the student; representing, as they do,

(1.) The normal disc.
(2.) Optic neuritis, with hæmorrhages.
(3.) Syphilitic choroiditis.
(4.) Primary optic atrophy.

Tables of comparative diagnosis are numerous; in so far as they act as summaries of the chapters they should be useful; but there is a tendency for students to try and learn such tables off by heart, and then they would be distinctly harmful.

The volume ends with short sections upon medical ophthalmology, and the medical application of electricity, followed by what seems to be an excellent index.

It is neither the excellence of the written matter, nor the fact that similar articles cannot be found elsewhere, which will commend this volume to the student; but rather the convenient size of the book, the advantage of having a good account of all nervous diseases in a binding by themselves, and above all the moderate price of the edition.

Surgical Applied Anatomy. By Sir Frederick Treves, F.R.C.S. (Cassell & Company). Price 9s.

A fourth edition of this justly popular work has just been published. The book is about the size of the former editions, but many of the chapters have been re-written and brought up to date, and new illustrations have been added.

The anatomy is that which especially appeals to those studying surgery, as only those points which are of practical value are dealt with. Cases are quoted and serve to make points interesting and at the same time to impress them on the mind.

In places a line of reasoning is followed very similar, as the author admits, to that employed by Mr. Hilton, in his famous lecture on "Rest and Pain." Some consider this to be somewhat fanciful, but in our opinion it softens the rugged lines of pure anatomy and encourages healthy thought on the subject instead of mere committal to memory.

It is not too much to expect that the present edition will meet with the degree of favour accorded to its predecessors.

Manual of Surgical Treatment. Part V. By Cheyne and Burghard. (Published by Longmans & Co.) Price 18s.

This is the last volume but one of this work, it deals with the treatment of the surgical affections of the head, face, jaws, &c., and it also contains a most valuable account of the intrinsic diseases of nose, ear and larynx, by Dr. Lambert Lack.

The first chapters, which deal with intra-cranial injuries and suppuration, are particularly clear and to the point, whilst the figures illustrating this portion will be found very helpful. But perhaps the most striking feature of this volume is the excellent account given by Dr. Lack of the diseases of the nose and throat. He deals with middle ear disease, mastoid disease, and other important subjects, in considerable detail, but at the same time he clearly indicates the right line of treatment and does not leave the reader floundering amongst numerous methods, all of which seem equally good or bad, as the case may be.

The respective merits of intubation and tracheotomy are so often the subject of discussion in the wards, that it is interesting to quote Dr. Lack on this point. He says: "Intubation avoids a cutting operation with loss of blood, shock, and the necessity for an anæsthetic, and there is no open wound to become infected. It has, however, the disadvantages that the tube may become blocked and require immediate removal . . . . . that there is difficulty in administering food, and that if too long retained, may cause erosion or ulceration. It gives, however, much better results in children under five suffering from acute laryngeal stenosis, than does tracheotomy. Tracheotomy, however, is safe in older children when a skilled attendant is not always at hand."

The general aim and "get up" of the manual is now too well known to require description, and this number in every way maintains the high standard of the previous parts.

Messrs. Garrould, Edgware Road, send us their "Red Cross" Catalogue, which gives a very exhaustive list of uniforms and nursing accessories.

Everything that a nurse can require is to be had at their establishment at a reasonable price. Nurses doing private work should get one of these catalogues, as their list of dressings and invalid furniture, of which patterns and prices are given, would often prove useful to them when out of London.

In Lighter Vein.

How wildly my heart beat; how my whole frame trembled with excitement as I hurried down St. Thomas' Street, on my way to visit the greatest physician Guy's has ever produced. Following the long line of splendid equipages—many of them bearing ducal crowns—I arrived at the college gate. The courtyard of that medical structure was thronged with countless sufferers, waiting to see the great man.

Handing in a card, on which I had written "PRESS" in large type, I was at once conducted to the sanctuary. The passage outside was occupied by a German band, playing popular airs. The door was kept by Victor, artfully dressed in a costume representing a lump of sterilized gelatine. I presented him with a new frock coat and a pair of leggings. The door was opened, and I stood face to face with Dr. Stewis Lamn.

A bland face, a face puffy with the milk of human kindness, surmounted by a few hairs, beautifully curled, and you have him.

With a soft smile he pointed to a hard seat, which I took.

"Now, sir——," I began.

"*Professor*, if you please," he interrupted.

"Well, Professor, how did you arrive at your marvellous conclusions?"

"Quite simple," he replied. "I found that no one suffering from aneurysm had any evidence of my cure; and again, that no one having my cure got aneurysm; so I put two and two together."

"And did it make four?" I asked.

"Only two at present," he said.

On my asking to see the cure, he pointed to a microscope. Looking down, I beheld several fine specimens of the new cure, beautifully stained.

"Is it preventive as well as curative?"

"I guarantee that anyone taking a good dose will never suffer from aneurysm," he said, and I thought he blandly winked.

"What do the other physicians of this hospital think about the treatment?" I continued.

"There are no other physicians," he said.

"You are young to work these marvels!" I suggested.

He bent down and presented the top of his head for my inspection, revealing a beautiful patch of senile alopecia.

"You will take a dose before you go?" he urged, at the same time handing me a culture tube and a straw.

I edged towards the door. Seeing that I was off, he said: "Please do not let this interview get into the papers; I do so hate advertisement."

"Certainly not," I answered.

His jaw dropped.

I picked up my hat, and rushed out, making my way through expectant crowds, my ears assailed by the hum of innumerable bruîts, like the murmurings of a summer sea.

"THE BIRD OF PREY."

List of Books recently added to the Hospital Library.

Bowlby's Surgical Pathology, latest edition.
Coat's Pathology, latest edition.
Colyer's Irregularities of the Teeth.
Essig's Prosthetic Dentistry.
Goodhart's Diseases of Children, latest edition.
Gower and Taylor's Diseases of the Nervous System, vol. I.
Green's Pathology, latest edition.
Hammersten's Physiological Chemistry.
Kaposi's Hand-atlas of Skin Diseases.
Kirk's Mechanical Dentistry.
Norris and Oliver's System of Diseases of the Eye.
Schäfer's Physiology, vol. II.
Starling's Physiology, latest edition.

PRESENTATIONS.

By the Authors—
Galabin's Midwifery, fifth edition.
Hood's Appendicitis.
Lane's Clinical Lectures on Cleft Palate, &c.
Phillip's Diseases of Women.
Sawyer's Practical Medicine.
Barton's Records from General Practice, parts 1 and 2.
Hale White's Materia Medica.

By Mr. Thomas Bryant—
Index Catalogue of the Library of the Surgeon-General's Office, United States Army, constituting a very efficient *Index Medicus*:—First Series, vols. 1 to 16, A to Z. Second Series, vols. 1 to 4, A to E (in course of issue).
John Hunter's Lectures on Surgery (in MS.)

Messrs. Bailliére, Tindall & Cox—
Carpenter's Syphilis in Children.
De Méric's Dictionnaire des Termes de Médecine.
Eccles on Hernia.
Gadds' Synopsis of B.P., 1898.
Greenwood's Law relating to Poor-law Medical Officers and Vaccination.
McCallin's Jurisprudence.
McNaughton Jones' Diseases of Women, eighth edition.
Rose & Carless' Surgery, third edition,
Sewill's Dental Surgery, fourth edition.
Stewart's Physiology, fourth edition.
Syme's Bacteriology.
Tubby's Appendicitis.

Messrs. Bale, Sons & Danielsson—
Mansell Moullin on the Appendix.

Messrs. Cassell & Co.—
Butlin & Spencer's Diseases of the Tongue.
Herman's Difficult Labour, second edition.
Hillier's Tuberculosis.
Luff's Chemistry.
Morriss' Diseases of the Kidney and Ureters.
Treves' Surgical Applied Anatomy.

Messrs. Churchill—
Maylard's Surgery of the Alimentary Canal.
Smith's Forensic Medicine.

H. K. Lewis—
Buxton's Anæsthetics.
Duhrssen's Gynæcology.
Gould's Dictionary of Medical Terms.
Jones' Medical Electricity, second edition.
Oliver's Blood and Blood-pressure.
Parkes & Kenwood's Hygiene.
Swanzy's Diseases of the Eye.

Births.

BRYANT.—On August 25th, at 126, Anlaby Road, Hull, the wife of W. A. Bryant, M.B., C.M., of a daughter.

HOWE.—On August 24th, at Deepdale House, Burrow Road, Preston, the wife of Dr. J. Duncan Howe, prematurely, of a stillborn son.

Deaths.

CLEATON.—On August 21st, John Davies Cleaton, M.R.C.S., L.S.A., Commissioner in Lunacy, of 19, Whitehall Place, London, aged 76.

EDWARDS.—On August 23rd, at 34, Peckham Road, S.E., Francis Guy Hewlings, the infant child of Francis Henry Edwards and Eleanor Margaret his wife.

ED.—D. G. G.

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Notice.

All Communications, Articles, Letters, Notices, and Books for Review, should be forwarded, accompanied by the name of the sender, to the Editor, GUY'S HOSPITAL GAZETTE, *Guy's Hospital, S.E.*

Any of our Subscribers who may be desirous of having their numbers of the GAZETTE *bound should leave them with the Librarian.*

The annual Subscription to the GAZETTE *is* 6s. 6d.; *post free,* 7s. 6d. *All financial communications, as well as subscriptions, should be sent to the Financial Editor,* Mr. C. H. WELLS, SECRETARY'S OFFICE, GUY'S HOSPITAL.

The charge for binding in blue, with the Arms of the Hospital in gold will be ONE SHILLING AND SIXPENCE.

Calendar of Coming Events.

September, 1901.

Sat. 28.—Messrs. Lucas and Lane's take-in; Drs., H. Tipping and K. Anderson; Cl., G. Clarke.

Mon. 30.—Exam. for Entrance Scholarship in Dental Mechanics.

October.

Tues. 1.—Winter Session begins.
First part Camb. D.P.H. Exam. begins.
Messrs. Lucas and Lane's take-in; Drs., H. Tipping and K. Anderson; Cl., A. Wylie.
G.H.R.F.C., Trial game, home.

Thur. 3.—Messrs. Golding-Bird and Dunn's take-in; Drs., C. M. Murray and J. B. Copland; Cl., H. K. Lacey.

Sat. 5.—G.H.R.F.C., I., Kensington, away.
II., Kensington, home,
III., King's College Engineers "A," away.
G.H.A.F.C., I., Trial game, home.
1 p.m., Clinical lecture by Dr. Pitt.
G.H.P.P.S., General Meeting.

Mon. 7.—November Appointment List opened.
1.15 p.m., Clinical lecture by Mr. Lucas.

Tues. 8.—First Conjoint Exam. begins.
Second Part Camb. D.P.H. Exam. begins.
Test Exam. for L.D.S. Eng.
Test Exam. for 1st Professional Exam. for L.D.S. Eng.

Wed. 9.—G.H.A.F.C., I., Trial game, home.

Thur. 10.—Messrs. Jacobson and Fripp's take-in; Drs., W. E. J. Tuohy and W. L. M. Day; Cl., A. C. H. Gray.
Second Conjoint Exam. begins.

Fri. 11.—November Appointment List closed.
4 p.m., Meeting of Dental Society.

Sat. 12.—1 p.m., Clinical lecture by Dr. Pitt.
G.H.R.F.C., I., Lennox, home.
II., Lennox, away.
III., Catford Bridge II., away.
G.H.A.F.C., I., Old Harrovians, home.
II., Central Technical College, away.

Guy's Hospital Gazette,

SEPTEMBER 28, 1901.

A Welcome and a Warning.

THE first of October is no less an important date to the medical student than it is to the pheasant, for with its dawn the medical school wakens from the slumber of the summer vacation; once again the dissecting-room is filled with the buzz of suppressed conversation; coats white from the wash flit hither and thither, dazzling the eye and instilling the fear of authority into the bewildered freshman. Each hurrying figure, eagerly making for the theatre, is marked by the eagle eye of the man with the book. Then there is a rattle of wheels outside. Suddenly a well-known figure appears, conversation is abruptly broken off, lingering smoke clouds are hastily brushed away, and the first lecture of the session has begun.

To all those, who, in spite of the terrible picture of a medical man's trials and responsibilities drawn in some of our contemporaries, have dared to adopt medicine as a profession and to enter Guy's, we extend our heartiest welcome and congratulations; for although there can be no doubt that as a profession, medicine demands

of its followers a rigid adherence to work, and an amount of self-sacrifice seldom required by any other profession, yet the man who feels the fire of enthusiasm for his calling will never regret having entered it, and in days to come he will look back on the time spent at Guy's as the best and happiest in his life.

The making of a real Guy's man does not alone consist in paying fees and signing the register; these are merely preliminaries. Time alone will allow the freshman to fully understand and to make his own the traditions which are so characteristic of our famous School. As a hospital Guy's has alway's prided itself on the greater liberty and responsibility that it allows to its senior men; this being so, it behoves every man from the very commencement of his career to do his utmost to fit himself for the position he hopes to occupy.

The chief essentials to arrive at this end are, reliance on one's own powers, rather than asking another's advice at every little difficulty, and perhaps even more important, that knowledge should be acquired from practical work and actual observation. It is courting certain failure to allow reading to usurp the position held by practice, the facilities for which at Guy's, both in the school and the hospital, are unequalled.

In passing, may we here warn the younger men that although the genial Mr. Pickwick was only too ready to excuse the behaviour of Mr. Benjamin Allen and Mr. Bob Sawyer, "very fine fellows, with judgments matured by observation and reflection, tastes refined by reading" as merely the "eccentricity of genius," the too frequent fault of the young student in trying to impress the lay mind by gruesome details of dissections and other technicalities, cannot be too strongly condemned. It has been well said, "A man's profession should be suggested by his manner rather than by his conversation."

One word more, Oliver Wendell Holmes, in his "Autocrat at the Breakfast Table," tells us that he used to find that after he had delivered a new lecture a few times, it lost interest for him. The thing seemed stale and insipid and without verve, but by continuing persistently to give it, he found that the early zest which he felt came back to him, and that afterwards he could go on giving that lecture any number of times. In some respects it is not unlike this is the medical student's experience. The interest he feels in his work at the outset not infrequently declines after a few months, and he is apt to feel that he has undertaken an almost impossible task. The height he wishes to reach seems almost beyond him; the mass of knowledge he has to gain and make his own is apparently too vast for him to acquire. Out of this depression springs a feeling of discouragement. But this mood, if one be wise, he will not yield to. The height has to be scaled, not all at once, but only step by step. Ahead of every student are examples of success which have been the outcome, not so much of genius as of steady, plucky work, and by these he should be stimulated to do "his level best." No man is at his best except he believes that where others have trodden he can himself tread. The transitory discouragement, then, which may settle like a cloud over the spirit, may and should be "sent about its business" as something that is not worth troubling over.

Chapel News.

The Harvest Festival has been fixed for Sunday, October 13th.

Two lectures to students have been arranged, under the auspices of the Chapel Committee, on November 5th and 19th, at 4 p.m., in the Court-room. The lecturer will be the Rev. P. N. Waggett, who will take as his subject "The Relation between Religion and Science." Mr. Waggett was a pupil of the late Professor Romanes, and is now one of the Cowley Fathers, and few men could be found more competent to deal with the subject selected. These lectures will take the place of the monthly lectures to men in the Chapel arranged last year and the year before.

The possibility of improving the musical rendering of the services in the Chapel has engaged the attention of the Chapel Committee for some time. With the approval of the House Committee, it has been decided to dispense with the choir of boys, and to rely in its place upon the Sisters' and Nurses' Choir. Since this latter choir has been formed, the improvement in the singing in the Chapel has, in the opinion of the Committee, been sufficiently marked to justify the proposed change. When the change takes place, it will rest with the nurses to make the experiment a success.

Lectures* for Sessions 1901–1902.

WINTER SESSION. OCTOBER—MARCH.

†	LECTURERS.		DAYS.					
Anatomy (1st & 2nd)	Mr. Lane and Mr. Dunn	9	—	Tu	W	Th	Fri	—
Microscopical Pathology (3rd) ...	Mr. G. B. Smith and Mr. Pakes ...	9	—	Tu	—	—	Fri	—
Pathological Classes (3rd & 4th)	Dr. Fawcett and Mr. Steward	9.15	—	—	W	Th	—	Sat
Bacteriology (Oct. & Nov.) (4th)	Dr. Washbourn and Mr. Pakes ...	4	M	Tu	—	—	Fri	—
Practical Obstetrics (3rd & 4th)	Mr. Targett (Oct.)	—	—	Tu	—	—	—	—
Chemical Physiology (Jan.) (2nd)	Dr. Pembrey, Dr. Beddard & Dr. Spriggs	11	—	—	—	—	Fri	Sat
Biology and Botany (pre. sci.)...	Dr. Stevens	2	—	—	W	—	Fri	—
Chemistry (1st and pre. sci.) ...	Mr. Wade	12.15	—	Tu	—	Th	—	—
Practical Chemistry	Mr. Wade, Mr. Ryffel and Mr. Ball ...	10-12	—	Tu	—	Th	—	—
Advanced Practical Physiology (3rd)	Dr. Pembrey	11	M	—	W	—	—	—
Practical Medicine (3rd) ...	Dr. Cleveland	12.30	—	—	—	Th	—	—
Experimental Physics (pre. sci.)	Professor Reinold and Mr. Ball ...	12	M	—	—	—	Fri (2)	—
Chemical Physics (1st)	Professor Reinold	2	—	—	—	—	Fri	—
Practical Surgery (3rd)	Mr. Simpson	12	—	—	W	—	Fri	—
Physiology (2nd)	Dr. Washbourn and Dr. Pembrey (Oct.-	10	M	—	W	—	—	Sat
Clinical Medicine (3rd & 4th) ...	The Physicians ... ... [Dec.)	1	—	—	—	—	—	Sat
Surgery (3rd)	Mr. Howse and Mr. Lucas	1.30	—	Tu	—	Th	Fri	—
Clinical Surgery (3rd & 4th) ...	The Surgeons	1.30	—	—	W	—	—	—
Elementary Biology (1st) ...	Dr. Stevens and Mr. Swan	2	M	—	—	Th	—	—
Mental Physiology (Oct. & Nov.) (3rd & 4th)	Dr. Savage and Dr. Hyslop	2	M	Tu	—	Th	—	—
Morbid Anatomy (3rd & 4th) ...	Dr. Fawcett and Dr. Bryant	2	M	Tu	W	Th	Fri	Sat
Medicine (3rd)	Dr. Taylor and Dr. Hale White ...	4	M	—	W (3)	—	Fri	—
Ophthalmic Surgery (Jan.) (4th)	Mr. Higgens	3	—	—	W	—	—	—
Public Health (Jan.) (4th) ...	Dr. Sykes	4	M	—	—	—	Fri	—
		—						
Dental Surgery and Pathology...	Mr. Newland-Pedley	4	—	—	—	Th	—	—
Metallurgy	Mr. Wade	4	M	—	—	—	—	—
Practical Dental Metallurgy ...	Mr. Hopson (Jan.)	3.30	—	Tu	—	—	—	—
Dental Anatomy & Physiology...	Mr. Maggs	4.30	—	—	W	—	—	—
Dental Mechanics	Mr. Wynne Rouw (Oct.–Dec.)	4	—	Tu	—	—	—	—
Practical Dental Mechanics ...	Mr. Pillin (Jan.)	2.30	—	—	—	—	Fri	—

SUMMER SESSION. MAY—JULY.

†	LECTURERS.		DAYS.					
Medical Jurisprudence (3rd & 4th)	Dr. Stevenson	9.45	—	—	W	—	Fri	—
Midwifery (3rd)	Dr. Galabin	9	—	Tu	W	Th	—	—
Diseases of Women	Dr. Galabin	9	—	—	—	—	Fri	—
Pathology (3rd)	Dr. Pitt	9	—	—	—	—	—	Sat
Mental Diseases (3rd)	Dr. Savage	9.30	—	Tu	—	—	—	—
Bacteriology (May & June) (4th)	Dr. Washbourn	9.30	M	Tu	—	—	Fri	—
Practical Obstetrics (3rd) ...	Mr. Targett	—	—	Tu	—	—	—	—
Biology and Botany (pre. sci.) ...	Dr. Stevens	2	—	—	W	—	Fri	—
Physiology (2nd)	Dr. Washbourn and Dr. Pembrey ...	11	M	—	W	—	—	Sat
Histology (1st)	Dr. Pembrey, Dr. Beddard and Dr. Spriggs	9	M	—	W	—	—	Sat
Practical Medicine (3rd) ...	Dr. Cleveland	12.30	—	—	—	Th	—	—
Experimental Physics (pre. sci.)	Professor Reinold and Mr. Ball ...	12	M	—	—	—	Fri (2)	—
Clinical Medicine (3rd & 4th) ...	The Assistant Physicians	1.30	—	—	W	—	—	—
Clinical Surgery (3rd & 4th) ...	The Assistant Surgeons	1.15	—	—	—	—	Fri	—
Clinical Gynæcology (3rd) ...	Dr. Galabin	1.30	—	Tu	—	—	—	—
Morbid Anatomy (3rd & 4th) ...	Dr. Bryant and Dr. Fawcett	2	M	Tu	W	Th	Fri	Sat
Materia Medica (2nd)	Dr. Perry	4	M	—	W(3)	—	Fri	—
		—						
Operative Dental Surgery ...	Mr. Badcock	9	—	—	—	Th	—	—
Chemistry	Mr. Wade	12.15	—	Tu	—	Th	—	—
Practical Chemistry	Mr. Wade, Mr. Ryffel, and Mr. Ball ...	9	—	Tu	—	Th	—	—

* No effort has been made to include the many demonstrations or practical work.

†The numbers in this column refer to the years in which this course should be attended.

The Sciences.

ANATOMY AND THE DISSECTING ROOM.

How to begin Work.

THE first working day spent at Guy's Hospital is always a memorable event. There is a feeling of strangeness, which is quite natural. We are but vaguely conscious of what is to be done, and blissfully indifferent how to set about it. The very names of the subjects we have been told to learn convey no meaning, and the school buildings, with their various class-rooms and theatres, are an unexplored country through which we travel as in a maze.

For the help of the new men, it is proposed to give such instructions as they may need in beginning the work of their first winter session at Guy's. It will be assumed that they have already decided what the general course of their study is to be, that is briefly, whether they are going in for the Preliminary Scientific Examination of the London University or not. Information on these matters is readily obtained at the medical school office, and any student who is not clear in his mind as to the examination he has to prepare for, should read carefully page 70 in the green book.

After the first few days men soon become familiar with the work, and learn from one another. But at first they have made no acquaintances, and all around them are strangers alike.

Under the Five Years' Regulations of the Conjoint Board, the first object of the student (entering, for instance, in October, 1901) is to pass the examinations in Chemistry and Biology, as failure to complete these by the following March (*i.e.*, 1902) must postpone the date at which the Second Conjoint should be passed (*i.e.*, April, 1903), *vide* par. 6, p. 394, so that students are advised, unless they have passed either one or both of the above subjects, before entering the hospital, or are unusually well versed in the subjects for these examinations, to postpone dissections until one or both (Chemistry and Biology) have been completed.

What follows refers, therefore, only to those who intend to undertake their dissections at once.

Tuesday, October 1st.—There is no actual work done on this day, but each student who is ready to dissect (*vide supra*) should pay his fee, *vide* par. 2, p. 394 for anatomical material in the medical school office, and take the receipt across to the dissecting-room and present it to the demonstrators. He should then study the red book—which contains the rules of the dissecting room—and purchase the necessary instruments and the other paraphernalia therein indicated. Any spare time is well spent in learning where the museums, class-rooms, and theatres are situated. The ground plan at the front of the green book will show them at a glance, and serve as a very efficient guide.

Wednesday, October 2nd.—At 9 o'clock in the morning the start is made, and we get our first introduction to the duties of hospital life at a lecture by Mr. Lane in the anatomical theatre, and at twelve o'clock a demonstration is given by the Senior Demonstrator in the small theatre attached to the dissecting-room, both of which every new student is expected to attend.

To find a "Part."

Look down the list of names on white cards which are suspended upon the wall of the dissecting-room opposite each subject or body. Be careful to take the proper side (right or left) which is allotted to you. If you fail to find your name on these cards, make yourself known and report the fact to one of the demonstrators present, who may be recognised by his white coat. The next thing is to obtain a bandage and cloth from the attendant (Hancock), who will be found in a room outside the dissecting-room. With these the "part" must be covered up at once to prevent the skin from drying. If the "part" is a limb, bandage it firmly from the hand or foot upwards as far as the bandage will go, and cover the remainder with a cloth, *but be careful to leave the metal ticket exposed to view.*

The Requisites for Dissection.

The following articles are essential, and must be purchased at once:—

a. Case of instruments. This should contain at least four knives, forceps, scissors, hooks, needle and blowpipe. Price 15s. to 20s., at Messrs. Down Bros., of St. Thomas's Street; or at Messrs. Hills & Co., of Newcomen Street; also from Hancock, the dissecting-room attendant.

b. Books. These are obtainable at Grattan's in the Borough, next door to the post-office. It is advisable to obtain either *Ellis's Demonstrations of Anatomy* (9s. 6d.), or, better, the more expensive *Cunningham's Practical Anatomy* (2 vols. 9s. 6d. each) for use in the dissecting-room, which show how to proceed and what is met with in the course of dissection; *and* one at least of the standard text-books, viz., Gray, Morris, or Quain. The inquirer will hear their merits compared at the introductory lecture and demonstration; if still in doubt he should consult personally one of the demonstrators, and take with him any old text-book he may possess for inspection and advice as to its use.

c. An apron and sleeves for the sake of protection and cleanliness. These are sold by Hancock. Any old coat may be worn under them. Instruments, books, apron and coat must be safely put away in a locker provided for the purpose; the key is obtained by making a deposit of 5s. at the Medical School Office. During the day hats and coats are kept at a special cloak-room near the dissecting-room.

d. A disarticulated skull and a half skeleton. (*See below*).

With regard to all the necessary articles mentioned above in *a b* and *d*, it is well to point out to the new students that many men who have just completed their anatomical studies may wish to dispose of some of the above articles second-hand, and new students may obtain information about, and details of such things

to be bought, from the librarian, Hancock, or the commissionaire, with whom such things are usually lodged. Before completing any such purchase it is always best to make sure that the books are of the last edition published and that the instruments are reliable, points on which any of the demonstrators will gladly give advice.

How to Dissect.

The instructions given on this point in the text-books are by no means clear to one who has never done any dissecting in his life, and who does not know the meaning of half the scientific words in which the directions are given. He finds quite a new language in use, and no translation of it in the margin. Thus, he is told to "make an incision," instead of "cut"; to "refleet the integument," for "turn back the skin"; "anterior and posterior," instead of "in front and behind." Not a little of the difficulty and dulness attaching to anatomical descriptions depends on the need of a mental translation of the language in which they are written.

To deal fully with the skilful act of dissection is unnecessary here, and we will merely give such short directions as are needful for the work of the first two or three days. The objects of dissection are—firstly, to educate the sense of touch, and to teach the hand and the eye to work together in delicate manipulation; and secondly, to enable the student to see and handle the different structures that he reads about in his books. It is most decidedly not the object of dissection to lay bare the bone in the middle of the "part" in the shortest possible time. That is butchery, not dissection. The following advice, then, may be given.

1. Take your book by which you intend to dissect (Ellis or Cunningham) and read over the pages giving directions for the skin incisions to be made in that particular part you are about to dissect.

2. Cut through the skin along the lines given in the books.

3. Turn back *the skin only*, leaving the fat upon the body. This is done by holding the knife obliquely with its edge towards the skin.

4. Take away the fat carefully without damaging the dense white layer which covers the muscles.

5. Clean the surface of the muscle. To do this make the muscle taut by moving the limb, or pulling on it with hooks; then with the point of the knife clear away everything covering the muscle by working *with* its grain or fibre, *not* across the fibres,

6. Before taking any fresh step in your own dissection get a notion of the arrangement of the parts you are going to expose, either from another man's part, or from the wax model museum preparations. *Most important of all, never remove any structure until you have obtained a good mental picture of it, and have also read in your book the description of it, and have satisfied yourself you know it.*

7. Work very slowly at first. To turn back the skin carefully is quite enough to occupy the first day's work-time.

8. Cover the "part" up with a cloth before leaving it for the night.

The red book containing the rules of the dissecting-room will be found to contain a lot of useful information, which we give in full below, and should be read with care, and then kept always at hand.

Osteology.

Usually considered a very dry subject; hence commonly studied in a stuffy museum after a heavy lunch with—the usual result. Like other branches of anatomy it must be learnt practically—by handling the bone, reading the description of it, and noting the various marks upon it, each one of which has its meaning. In order that the bones may be studied at home as well as at the hospital, it is very important that each student should possess them. Half-sets of osteology, that is, the bones of one side of the body with the spine and head, can be obtained second-hand at a very moderate outlay, and if carefully used they will at the end of the course readily fetch half the original cost, or even more. Some very useful half-sets (second-hand) are to be seen at Messrs. Millikin & Lawley's, 1C5, Strand, W.C., price 30s. If these are disposed of at the end of the second Conjoint examination for half the price, it follows that the immense advantage of having the bones always at hand while preparing for the examinations is obtainable at the expense of a few shillings.

In selecting a half-set of osteology it is as well to have the guidance of a fellow-student who is familiar with them. See that the half-set is complete, and that each bone is of the *same* side. Avoid "the nice white bones," which dealers always charge extra for, and choose the rougher, better marked and dirtier ones. The preparation which makes them white, does away with many of the marks and ridges which have to be studied. With regard to the disarticulated skulls, try the separate bones and see whether they fit into each other properly, as it is not uncommon to find skulls offered for sale, the bones of which have come from different subjects, and hence cannot be articulated.

It may be necessary now that the Elementary Anatomy examination has been done away with at the College, to caution men against neglecting the subject during their first year. They will find the second year's work quite heavy enough as it is, and moreover may suffer the mortification of being spun in the hospital "Bone" examination at the end of the first winter session, if they neglect the bones in their first month's work.

Rules of the Dissecting Room.

1. All first and second year's Students, and all those senior to the second year, who have not passed the Second Conjoint Examination, are expected to attend in the dissecting-room on the first day of the Winter Session, between the hours of 10 a.m. and 4 p.m., or on the second day between the hours 10 a.m. and 12 noon. Each student must bring with him a voucher indicating that he has paid the special fee for material, which voucher must be handed to the demonstrator in order

that the student's name may be enrolled in the appropriate class list.

2. The fee for material (which should be paid in the Medical School Office on or before the first day of the Winter Session, between the hours of 10 a.m. and 1 p.m.) is—

For each academic year:—

First Year's Students	25/-
Second Year's Students	
*Students Senior to the Second Year but not yet through the Second Conjoint Examination	
Students who have passed the Second Conjoint Examination and are now reading for the First F.R.C.S. or Int. M.B. ...	10/6
Students going up for the L.D.S. Examination only	
Students who enter during May (fee for the Summer Session only)	

3. The senior demonstrator (Mr. Fagge) will meet the first year's students on the second day of the Session, Wednesday, October 2nd, at 12 noon. and give them a demonstration to initiate them into the work of the dissecting-room. Immediately after this demonstration parts will be allotted to students.

4. On the following Wednesday the Bone classes, which are held by Mr. Rowlands and Mr. Swan, begin. Every student must purchase a half skeleton and bring to the class the bone or bones which will form the subject of the demonstration. Regular attendance at these classes is compulsory until a student has passed in Elementary Anatomy. Students now beginning their dissections will be allotted either an upper or a lower (arm or leg), and on which of the two each is dissecting will depend which set of bone classes he is to attend. The student allotted an upper will attend until Christmas Mr. Swan's Bone classes on the arm and head, while the student dissecting the lower will attend Mr. Rowlands' classes on the leg, pelvis and thorax, and after Christmas as he is dissecting the alternative part, the student attends the other set of classes.

5. The senior demonstrator will meet the second year's students on the third day of the Session. The Second Conjoint Class demonstrations given by Mr. Rowlands and Mr. Swan begin early in the following week.

6. No student shall be enrolled in the Second Conjoint list or allowed to begin dissecting as a second year's student until he has passed in Elementary Anatomy and in Biology and Chemistry at the First Conjoint Examination.

7. The notice-boards in the dissecting-room should be examined daily throughout the Session. Here will be found class lists, notices of allotment of parts, announcements of vacancies for prosectors, arrangements for examinations, etc., and notices of alterations in standing arrangements. Every student's name should appear in one of these class lists, and any student failing to find his name should at once inform one of the demonstrators.

8. A written examination is held just before the Christmas Vacation. Every first year's student is required to attend and answer the questions on one of the following group:—

(A) The bones and ligaments of the head, and the bones, ligaments and muscles of the upper extremity; or

(B) The bones and ligaments of the spinal column and thorax, and pelvis, and the bones, ligaments and muscles of the lower extremity; or

(C) (*if he is taking the L.D.S. only*) The bones and muscles of the head, and the temporo-maxillary, occipito-atlanto-axoid and cervical joints.

Every second year's student is required to attend and to answer questions on—

The muscles, tendons, bones and ligaments of the whole body; and one of the following groups:—

(α) The entire anatomy of the upper extremity and of the head and neck, including the brain and spinal cord; or

(β) The entire anatomy of the lower extremity and of the abdomen, pelvis and thorax; or

(γ) (*if he is taking the L.D.S. only*) The entire anatomy of the head and neck, including the brain.

9. A written examination (the School Elementary Anatomy Examination) is held at the end of the Winter Session, and this every first year's student who has dissected during the session (except L.D.S.) is required to attend and to answer questions on the muscles, bones, and ligaments of the entire subject. Completion of this examination is regarded as part of the work to be included by each student in his first year, and the marks obtained at the Christmas examination (paragraph 8) are taken into account by the examiners. A similar examination is held in July, October and January, for those students who fail to pass in March.

10. The dissection of all parts allotted in October and November must be completed before Christmas, and on the second day after the recess new parts will be allotted, priority being given as far as possible to those students who showed themselves most painstaking in their previous work. A first year's student who, before Christmas, studied sub-division (A) in Rule 8, will now study sub-division (B); but in addition every student should, in this his second part, try to master as much as possible of the vessels, nerves, etc.

11. The senior demonstrator holds classes throughout the Winter and Summer Sessions for (i.) Students preparing for the First F.R.C.S. and M.B. Examinations of the various Universities, including a special course of demonstrations in Embryology; (ii.) Students who, though they have completed their second year, have not yet passed the Second Conjoint Examination.

*This Fee must be paid by every such Student whether it is his intention to dissect or not.

12. Every student is advised to carry with him when in the dissecting-room and demonstration theatre a pocket note-book and a set of coloured chalks.

13. Every week the dissections are examined systematically by the demonstrators, and marks are allotted. The record thus kept of each student's diligence in the dissecting-room is taken into account in subsequently recommending to appointments in the wards.

14. A test examination is held about three weeks before each Second Conjoint Examination. Attendance at this examination is compulsory on all those who wish to present themselves for the Conjoint Examination for the first time; for those, however, who have previously been referred in this examination, three test examinations are held before each of the Conjoint Examinations in January, April and July, as follows:—

a. About two months before examination on the anatomy of the upper and lower.

b. About six weeks before examination on the anatomy of the abdomen and thorax.

c. About three weeks before (coinciding with examination for unreferred students), on the anatomy of the head and neck, including the brain.

Before the October examination the test examination for referred students is the same as for those who have not been referred.

15. During the first Summer Session, a student who entered in October, and has passed the School Elementary Anatomy and the Biology and Chemistry of the First Conjoint Examination, should learn the anatomy of the brain, the spinal cord, the heart, the lungs, the larynx and the liver. Demonstrations on these subjects are given by the senior demonstrator in the demonstrating theatre once a week during the Summer Session.

16. Particulars of the examination, for the Michael Harris, Arthur Durham and Hilton prizes, and for the prizes for General Proficiency, will be found in the prospectus of the medical school, which may be obtained in the medical school office.

17. About twelve prosectors to the lecturers on Anatomy are appointed annually (and from time to time a prosector to the Royal College of Surgeons of England) from among the students who have shown themselves most diligent in the dissecting-room. Notices inviting applications for these appointments are posted in the dissecting-room.

18. The metal ticket attached to each part must on no account be allowed to come off nor to be covered up by the bandage that each student should apply to his part (if a limb); neglect of this rule renders the part liable to be forfeited. Apron and sleeves (2s. 6d.), bandages, cloths, air-pump, ointment, carbolic lotion, etc., can be obtained from the dissecting-room porter.

19. No muscle, tendon, nerve, artery, or large vein, should be cut through, if by hooking it aside it is possible to reach and clean the parts lying on its deep surface.

20. No limb must be removed from the trunk except by one of the demonstrators or assistant demonstrators nor in any circumstances must any part of a subject be removed from the dissecting-room.

21. Except when the student responsible for a part is actually at work upon it, each part must rest constantly on the table of the subject to which it belongs. Neglect of this rule renders the part liable to be forfeited. When a student considers he has finished the part, he must report the fact to one of the demonstrators.

22. The subject is divided into five parts on each side:—

1. The Head and Neck.
2. Upper Extremity and Muscles connecting it with the Trunk.
3. Abdomen, with the Perinæum and interior of the Pelvis.
4. Lower Extremity.
5. The Thorax and Spinal Column; the dissection of which is not to commence until the fourteenth working day.

23. Students are not permitted to exchange or dispose of their parts, either before or after the commencement of dissection.

24. Any part, the dissection of which has not been begun within twenty-four hours from the time when the body is placed in the dissecting-room, is liable to forfeiture. If a student is unable to continue the dissection of the part which he has already begun, he must give notice *in writing* to one of the demonstrators, who will make arrangements for its disposal. The demonstrators will also dispose of any part, the dissection of which has been discontinued without their sanction for more than two working days.

25. The subject, when brought in, will be placed in the supine position, and will so remain during nine working days. On the tenth day a majority of the students engaged upon it, and on the fourteenth day any one of them may have it turned into the prone position. Five days later it may, if the majority so desire, be turned back again; and after six days in the prone position, any one of the dissectors may have it turned back. The time for the dissection of the perinæum is before 11 a.m. on the first ten days, and neither for this purpose nor for any other must the subject be turned out of the position indicated in this rule.

26. The dissecting-room is open from 9 a.m. till 4.30 p.m., except on Saturdays, when it is closed at 2 p.m.

27. On applying at the medical office a locker may be obtained for a deposit of five shillings (which will be returned when the key is given up, provided that the locker is uninjured).

DENTAL STUDENTS.

A dental student, on entry, must pay the fee (10s. 6d.) for material at the medical school office, on October

1st, between 10 a.m. and 1 p.m., so that a part may be allotted to him at the earliest opportunity. He should obtain a copy of the rules of the dissecting-room, and study those paragraphs which specially concern him. He should be careful not to miss the demonstration given by Mr. Fagge to first year's students, on Wednesday, October 2nd, at 12 noon.

Special classes on the bones, ligaments and muscles of the head and neck are held for first year's dental students by Mr. Rowlands, in the dissecting-room theatre on Wednesday, at 3.30 p.m. throughout the winter session (beginning on October 2nd).

During their first winter session dental students entering in October are expected to dissect the head and neck and to study the bones and muscles of the head with the temporo-maxillary and cervical articulations upon which they are examined at the end of the session in which they dissect the part. In addition, they should become acquainted with the main vessels, nerves, and special structures of these regions.

For those dental students entering in May a similar set of classes is held by Mr. Rowlands from May to July on Tuesdays, at 1 p.m. These students are also expected to finish their first part (head and neck) during the summer session and are examined on it in July. Failure to satisfy the examiner entails attendance at another set of classes during the winter session.

In their second winter dental students are allotted another head and neck, in which they are expected to dissect, besides the muscles and ligaments again, the vessels, nerves and other soft parts, and also to acquaint themselves with the anatomy of all the special regions of this part, *e.g.*, the orbit, mouth, pharynx, etc.

Mr. Rowlands holds anatomy classes for these students, throughout the winter session, in the dissecting-room theatre, on Mondays, at 3 p.m., and a test examination is held on the work at the completion of the dissection and the course of demonstrations. It will be agreed that the second dissection is even more important than the first, and it is well to realize that, as the work done by each man is noted and marked every week by Mr. Rowlands, and men are only signed up for the necessary session's work when these marks are satisfactory, that careful and conscientious dissection, punctual attendance at demonstrations, and industrious reading up of all the work, must be begun as soon as the dental student enters the dissecting-room, and continued until the subject is mastered.

It is very essential that the study of anatomy, physiology, and surgery should be prosecuted energetically from the outset, thus obviating the necessity for "cramming" these subjects when preparing for the final L.D.S. examination. Careful and patient dissection is the easiest way to learn Anatomy. An attempt to "cram" it from books is certain to result in disaster.

C. H. F.

PHYSIOLOGY.

Physiology, which treats of the working of the healthy body, and forms, therefore, the institutes of medicine and the necessary foundation of any rational mode of treatment of the body in disease, differs from its sister subject, Anatomy, in that it requires much greater intellectual efforts for its acquisition, and a more thorough preliminary training for the comprehension of its doctrines. Physiology consists chiefly in the application of the natural laws elicited by the researches of physicists and chemists to the explanation and description of the phenomena occurring in the living body, so that an acquaintance with the chief laws of physics and chemistry forms the necessary basis for the study of physiology. The difficulty and importance of this subject would seem to indicate, in the clearest possible manner, the necessity of pursuing its study throughout the short space of two years, which are devoted to the subjects that are preliminary to the work in the wards. On this account, the student beginning his medical studies in October must give all his energies to getting up his biology in order to pass in it at the earliest possible opportunity, and he may profitably combine with the biology lectures and classes the reading of some elementary work on physiology, such as Huxley's *Elementary Physiology*, or the smaller work on the same subject by Foster and Shore. He is advised to attend the physiology lectures at this time, but cannot be signed up for them.

By the ordinary student the practical study of the subjects included under the heading Physiology is begun in the first summer session. During the whole of this session he must attend the classes in Practical Histology. These are held in the students' histological class-room three times a week; each class lasts two hours, the first half-hour being taken up by a short lecture, in which the tissues to be studied in the following practical work are described. This lecture will be held in the physiological theatre. Students attending this course must provide themselves with a compound microscope,* certain mounting materials (a list of which can be obtained at the office), and with Schäfer's *Essentials of Histology*, which should be carefully studied in the intervals between the classes. The microscope must have two objectives, a $\frac{2}{3}$-inch and a $\frac{1}{6}$-inch, a nose-piece and an indicator fitted to one of the two eye-pieces. The following makers are recommended: Crouch, Zeiss, Ross, Leitz (English agent, Kanthack), Swift. From any of these latter firms a good microscope, with all necessary accessories, can be obtained for about £7; the microscope from inferior makers is worse than useless, and it is essential that the student should buy an instrument which will be of some use to him in future years, when as a practitioner of medicine he desires to examine tumours, urinary sediments, sputum, etc., for purposes of diagnosis.

* The demonstrators will be very pleased to advise any student in the purchase of a microscope. It must be distinctly understood that antiquated instruments, such as those sometimes handed down as an heirloom in a family of doctors, are practically useless.

At the end of the summer session an examination, written and practical, is held in histology. All students who have attended this class must enter for the examination. Only those who pass the examination will be allowed to attend the tutorial classes in physiology held during the second winter session in preparation for the examinations of the Conjoint Board. Those who fail at this examination will be allowed to enter for a similar examination at the following Christmas, but will not be able to present themselves for the second conjoint under six months from the time at which they passed this examination.

During the first summer session and the first half of the second winter session the student must attend regularly the lectures on physiology held three times a week, on Mondays, Wednesdays, and Saturdays at 10 a.m. During the same time those who have passed the histology examination at the end of the previous session must attend the tutorial classes held by one of the demonstrators throughout the session. At the same time he must read up the subjects in some elementary text-book, such as Starling's *Elements of Human Physiology*, or Halliburton's *Hand-book of Physiology*.

During the second half of the winter session, *i.e.*, from January to March, students must attend the class in practical chemical physiology, which is held once a week in the physiological chemical class-room. While attending this class, they are recommended to read up the subject in Halliburton's *Essentials of Chemical Physiology*, which is also used as the guide in the practical work.

Students who have been diligent in following this course of studies will be ready to enter for the second Conjoint examination at the end of this session. Shortly before this examination, a test examination is held by the demonstrators in order to judge of the fitness of the candidates. Those who fail to pass the second Conjoint at this time must attend the revision classes held by the demonstrators during the two or three months preceding the July and January examinations of the Conjoint Board.

Certain modifications in this course of studies is necessary for those who are going up for the M.B. of London or other Universities. Having passed their preliminary scientific before entering, they are free of the incubus of biology during their first winter session. They should therefore attend the physiological lectures during this session, at the same time studying the subject in Starling's *Physiology*. In their first summer they attend the histology classes, but should supplement Schäfer's *Essentials of Histology* by reading the fuller accounts of the subject contained in Quain's *Anatomy*. During their second winter, they should attend the class in advanced practical physiology, which is held twice a week, each lesson occupying between two and three hours. During this session they are recommended to read up the subject in Stewart's *Manual of Physiology* and Bunge's *Physiological Chemistry*, using Halliburton's *Essentials of Chemical Physiology* and Brodie's *Essentials of Experimental Physiology* as the guides in the advanced practical physiology. This class should also be attended by candidates for the first F.R.C.S. examination, although in their case attendance may often be profitably postponed until the third winter session. The reading for this examination is similar to that required for the Intermediate M.B. of London.

Those who are desirous of obtaining honours at the Intermediate M.B. should supplement the course of reading already indicated with original papers in the *Journal of Physiology* and with parts of Schäfer's *Text-book of Physiology* and of Gamgee's *Physiological Chemistry*. Such students will also find parts of Foster's *Physiology* extremely useful and suggestive.

Revision classes are held by the demonstrators during the two months preceding the first F.R.C.S. and first M.B. examinations for the special preparation of candidates for these examinations.

List of books recommended:—

FOR COLLEGE MEN.—Schäfer's Essentials of Histology; Starling's Elements of Human Physiology, or Halliburton's Handbook of Physiology; Halliburton's Essentials of Chemical Physiology.

FOR UNIVERSITY MEN.—Stewart's Manual of Human Physiology; Bunge's Lectures on Physiological Chemistry; Histological and Embryological parts of Quain's Anatomy.

BIOLOGY.

The Course of lectures and demonstrations for the requirements of students preparing for the first Conjoint examination is given in the long room, class room No. 2, at 2 p.m., Wednesdays and Fridays. The practical class will be held immediately after the lecture, and the new student is reminded that it is most important for him to attend both lecture and practical class from the *very first*, to obtain the knowledge in biology requisite for the Conjoint examination. The very closest attention to his work, more especially *in the practical part*, is necessary if the pupil would become familiar with a subject which, seemingly of not much value to him now, will be of no inconsiderable assistance in later work, particularly in the domain of morbid histology and bacteriology.

The first lecture will be given by Dr. Stevens, in the long room, class room No. 2, at 2 p.m., *October 2nd*. For the practical class, the requisites, of which a complete list is given below, must be obtained *beforehand*. We recommend new men, with reference to the purchase of a microscope—perhaps the most important consideration on entering these classes—that it should be deferred until one of the demonstrators has been consulted. We may state that microscopes are not absolutely necessary for the early classes, so that the purchase of one may be safely withheld until full instructions have been received from the demonstrators.

The special course of lectures and demonstrations devoted to the Preliminary Scientific examination of

London are held on Wednesdays and Fridays at 10 a.m. The first lecture will be given by Mr. Assheton on Wednesday, October 2nd, in the biological class-room, No. 4, on the first floor of the pathological museum block of buildings. "Pre. Sci." men will require the set of requisites that are notified below.

With regard to this list, we have already referred to the "microscope." In purchasing a "dissecting-case," students must understand that an ordinary (human) anatomical set is *all* that is required. The special "biological set" is by no means necessary for the elementary work required at Guy's, and is, therefore, a needless expense.

REQUISITES FOR THE PRACTICAL BIOLOGY CLASS.

Every student attending these classes must provide himself with a microscope fitted with a double nose-piece. Crouch's student's microscope with $\frac{2}{3}$rds and $\frac{1}{6}$th objectives, two eye-pieces and a double nose-piece, in mahogany case, price about £7 10s., is strongly recommended. It can be obtained from Mr. Crouch himself, or from Maw, Son & Thompson, Aldersgate Street. If a foreign pattern of microscope is preferred, Zeiss's or Leitz's is to be recommended, and can be obtained of Stanley, London Bridge: R. Kanthack, 18, Berners Street, W., or of Baker, 244, High Holborn. These microscopes are slightly more expensive than Crouch's. A cheaper microscope, which will serve the purpose, can be obtained from Messrs. Beck, of Cornhill, if preferred.

It will also be necessary to have the following:—Three small white saucers with flat bottoms; three watch-glasses ground on convex surface; two section lifters; three needles in handles; a pair of microscope scissors (curved on the flat); $\frac{1}{2}$-oz. No. 1 $\frac{3}{4}$-inch cover glasses; a gross of glass slides; a packet of labels; a small piece of soft silk; fine curved forceps; a "Seeker"; an anatomical dissecting case; a razor for cutting sections.

CHEMISTRY AND PHYSICS.

It is impossible to acquire a knowledge of chemistry or physics without personal and practical contact with the experimental side of these sciences, and Guy's men have, in the new laboratories, unusual facilities for this purpose.

Conjoint men entering now should pass in chemistry and physics next Easter, and should therefore attend the lectures in chemistry from October to March (Mr. Wade Tuesday and Thursday at 12.15), and the lectures on physics from October to Christmas (Prof. Reinold, Friday at 2). They must be prepared to devote a large amount of time to laboratory work. The practical classes are held in the chemical laboratory twice a week (Mr. Wade, Mr. Ryffel, and Mr. Ball, Tuesday and Thursday from 10 to 12), but students have access to their benches at all hours, and are advised to make free use of this privilege, if they wish to make satisfactory progress. The first class of the new session will commence at *10 a.m.* on *Tuesday, October 1st*, when *all Conjoint Students* should attend; the first lecture follows at 12.15. Revision classes are held before the April examination, and special classes for referred candidates before the January and July examinations; admission to these classes is dependent on the student passing the monthly test examinations in a satisfactory manner.

Conjoint students are not required to study chemistry or physics after passing the first examination, unless they wish to take the diploma in public health, in which case they work for three months at the analysis of water, air, food, etc., in the public health laboratory (Mr Pakes).

Dental students under the new regulations are required to go through the same course as the Conjoint men, and to pass the same (Preliminary Science) examination; they should attend the laboratory class at *10 a.m.* on *Tuesday, October 1st.* Students under the old regulations do not commence until January.

Special courses have been arranged for most of the University examinations. Candidates for the Preliminary Scientific (M.B.) examination of the London University attend the same chemistry lectures as the Conjoint men, but the physics lectures are specially arranged (Prof. Reinold, Monday at 12, Friday at 2). The Preliminary Scientific class meets for work twice weekly in the chemical laboratory (Mr. Wade, Mr. Ryffel, and Mr. Ball, winter and summer, Tuesday and Thursday 10 to 12), and twice weekly in the No. 1 physical laboratory (Mr. Ball: winter, Tuesday 2 to 4, Friday 3 to 4; summer, Monday and Thursday 2 to 4); *but students are expected to spend all their spare time in one or other of the laboratories.* It cannot be too often or too strongly urged that reading without laboratory work is mere waste of time. Tutorial classes are held weekly in both chemistry and physics, and are supplemented by revision classes during the term preceding each examination, and by periodical test examinations. Students intending to work for Honours in either subject should consult the demonstrators.

Intermediate M.B. men who have just passed the Preliminary Scientific examination should begin to work at organic chemistry at once if there is room in the laboratory. The attention of candidates is drawn to the recent radical alterations in the syllabus, and especially to the fact that the practical examination now includes the preparation and recognition of typical organic compounds. The practical class meets twice weekly in the laboratory throughout the year (Mr. Wade and Mr. Ryffel: winter, Monday and Thursday 2 to 4; summer, Tuesday and Thursday 2 to 4) and is supplemented by lectures, revision classes, and periodical test examinations. A course of experimental lectures for beginners will commence on Friday, October 4th (Mr. Wade, chemical theatre, 10), and a more advanced course for second year's men and others on Wednesday, October 2nd (Mr. Wade, chemical theatre, 2).

Oxford, Cambridge or Durham students desiring to work at chemistry should communicate with the demonstrators.

The practical knowledge of toxicology required at the degree examinations of the London and other Universities may be obtained at classes held by Mr. Ryffel during the latter part of the winter and summer sessions.

W.

PRACTICAL PHARMACY, MATERIA MEDICA, DISPENSING.

These subjects are taught in the practical pharmacy class at the hospital dispensary, by Mr. Finnimore. This course meets the requirements of students preparing for the Conjoint examination in practical pharmacy, and the intermediate M.B. Lond. The study of the names, physical characters, and chemical properties of substances used in medicine, and preparations made from them, and the doses in which they may be given, requires some considerable amount of application and exercise of memory. The instruction given in the class is therefore very practical, and every assistance is given to the student by demonstrations, access to materia medica specimens, and *vivâ voce* examinations, in acquiring a sound knowledge of materia medica. The art of dispensing, the writing of prescriptions, and the methods of prescribing drugs, form also part of the instruction given in the practical pharmacy class. During the year there are three courses of three months each, so that the student can enter at the time most convenient to him.

PHARMACY, PHARMACOLOGY AND THERAPEUTICS.

Lectures are given during the summer session in the anatomical theatre, by Dr. Perry. This course is intended to meet the requirements of students preparing for the third Conjoint examination in pharmacology and therapeutics, for the intermediate M.B. and final M.B. Lond., and the third M.B. Cambridge.

C.

MEDICINE.

Medicine lectures are held on Mondays and Fridays, at 4 p.m., and Wednesdays at 3 p.m., in the anatomical theatre, throughout the winter session, by Dr. Taylor and Dr. Hale White. The introductory lecture will be given by Dr. Taylor, on Wednesday, October 2nd, who will then proceed to discuss "Fever, Contagion and Specific Diseases."

A clinical lecture is delivered every Saturday, at 1 p.m., in the physiological theatre, the first of which will be given by Dr. Pitt, on Saturday, October 6th. These lectures are held at 1 p.m., so as to enable footballers to attend, and they finish in time for them to catch the 2.23 train to Honor Oak Park.

THE MEDICAL WARDS.

Clinical instruction in medicine is given in the medical wards to the medical ward clerks and other students who choose to be present, by the physicians, who visit their cases from 2 to 5 p.m., and by the medical registrar in the mornings from 10 a.m. to 1 p.m. There are two male wards, Philip and Stephen, each containing forty beds, and one female ward, Mary, containing fifty beds and six cots. The latter is divided into four divisions, each physician taking one division. Dr. Taylor and Dr. Hale White divide the beds in Philip ward between them, and Dr. Pitt and Dr. Perry those in Stephen ward. On Mondays and Thursdays the wards are visited in the afternoon by all the physicians; on Tuesdays by Dr. Hale White and Dr. Pitt; on Fridays by Dr. Taylor, Dr. Hale White and Dr. Perry; and on Saturdays by Dr. Pitt. The medical registrar sees new cases in all the wards on Monday and Thursday mornings; on Tuesday Dr. Taylor's cases; on Wednesday Dr. Hale White's; on Friday Dr. Pitt's; and on Saturday Dr. Perry's. Thirty-six medical ward clerks are appointed every three months, and are eligible for reappointment at the end of this time for a further period of three months, the extension being given to those who have shown the most care and diligence in the discharge of their duties.

Case-taking.—Reports are made by the medical ward clerks on all the cases admitted to the wards, under the supervision of the medical registrar, who instructs the clerks in the mornings in the method of case-taking and the physical examination of the patients. To each physician is appointed a clinical assistant, who superintends the writing of the reports and helps the clerks in any special examination of blood, urine, &c., which may be necessary.

The reports are written on special sheets, kept for the purpose in each ward, and the name, age, address, etc., of the patient should be carefully filled in, as well as any previous admissions into the hospital. In the latter case the abstract of the old report should be copied into the new report. Details as to how to find an old report will be found posted on one of the cupboards in the medical registrar's room, but if the previous admission was in the current year, reference should be made to the registrar for the report. Ward clerks should always make brief abstracts of the case at the end of the report, and in case of death the post-mortem abstract should be copied in, and when the report is finished it should be handed to the clinical assistant, who eventually sends it to the medical registrar. Where possible it is as well to put in the report what the physician said about the case, and especially his diagnosis, but clinical teaching on the disease in general should not be recorded, and great care must be taken to report the physician accurately.

Temperatures.—The temperature of the patients must be taken and noted every morning by their respective clerks. Evening temperatures are taken by the clerks in turn; the dates of this duty will be found on the notice-board in the central hall of Mary ward. The temperatures to be taken will be put on a card hanging on the wall in each division.

Classes.—On Thursdays classes are held for all medical ward clerks, at 12.30 o'clock, in the surgical class room,

on the methods of medical diagnosis, and the explanation of physical signs, etc. During the first six weeks of each three months, classes are held in the clinical laboratory for the junior clerks on the practical examination of urines and blood, and the use of the ophthalmoscope, laryngoscope, and other apparatus. During the last six weeks practical classes on ophthalmoscopic work are given by the ophthalmic and medical registrars.

The times of the classes will be found posted in the hall of Mary ward.

The Clinical Laboratory (opposite the lift in the medical buildings) is intended for those investigations which cannot be done in the ward. A microscope and a centrifugal machine, and special reagents are kept there, and examination of sputum, gastric contents and all quantitative analyses should be done there.

Several special reagents and blood stains are kept by the medical registrar locked up, and can be had from him on application.

Medical Instruments.—A laryngoscope, cyrtometer and instruments for examining blood are kept in Mary ward, and can be had, on application, from the Sister.

Tubes for taking cultivations, and pipettes for holding blood for Widal's serum reaction in typhoid fever, can also be had from the sisters of the wards, but these should not be used except with the help of the clinical assistant or the house-physician.

It is very important that the clerk should find out the result of the investigations made by the bacteriologist and record it in the report.

A few practical hints.—Never lose an opportunity of examining a patient for yourself, and then find out what you ought to have noticed. It is only by constant practice that you can train your senses to appreciate the signs of disease, and without this skill mere book knowledge is valueless. Therefore listen to the normal as well as the abnormal, and get into the way of examining your cases with some method, so that you have an intelligent idea of what you are trying to find out. Although only a few cases are under your immediate care it is not intended that you should limit your observations to these, but you should know well all the cases under your physician, and something about all the interesting ones in the medical wards. To do this, when your own cases have been attended to, you should go round with the registrar, or examine the patients allotted to other clerks, and ask what points of interest there are about each case. Also when your physician is not going round attend someone else's clinical instruction, either in the wards or at out-patients. Above all, remember that many of the patients think you to be a "doctor," and treat them as patients, and not as pathological specimens. You cannot be too gentle in an examination of a patient, nor too considerate for the feelings of a sick person. Remember, too, that though the post-mortem room should not be mentioned before patients, yet it is there that you will learn a great deal of medicine, and for you to know your business thoroughly you should never miss an opportunity of seeing the organs whose condition you have tried to make out during life.

As regards reading, Taylor's or Osler's Medicine are the best books, and at first you should read up your own cases and then others as you come across them. Hutchinson and Rainey's Clinical Methods, or Gibson and Russell's Outlines of Physical Diagnosis will also help you very much. M. R.

PATHOLOGY.

The large number of courses of instruction in pathology given in the school leads to some uncertainty in the student's mind as to the order and period of the curriculum in which they should be taken. Pathology is one of the few good things of which it is impossible to have too much, and probably the best advice that can be given to a student who has passed his second Conjoint or Intermediate M.B. is to take the instruction in pathology which is offered to him as early and often as possible. Most of the instruction in pathology is given in the early morning, so that it shall clash as little as possible with work in the wards, and it is rarely advisable to postpone attending a course till the time arrives, which many seem to expect but fortunately seldom reach, when ward duties shall be less exacting than they are at first. A man who leaves the dissecting-room in April should begin to attend Dr. Pitt's systematic lectures on pathology in the following summer session (Anatomical Theatre, Saturdays at 9), where he will be introduced to the great principles underlying pathological processes, and will learn something of the theories of disease, which will enable him to understand the facts revealed to him in the post-mortem room. He should remember that this course of lectures is not completed in one year, and that if he attends the lectures for three consecutive years he will each time hear different subjects treated of. If it is in the summer session that a student is released from his anatomical studies, he should begin to learn pathology at the winter demonstrations (Dr. Fawcett and Mr. Steward, Monday, Wednesday and Saturday, 9.15, in class-room No. 2). Here he will be introduced to the treasures of the pathological museum. Selected specimens will be brought from the shelves of the museum for his inspection, and the effects of pathological changes upon the various organs of the body will be demonstrated. The subject is roughly divided into medical and surgical pathology, two days a week being devoted to the former and one to the latter. The whole course occupies two years. At the end of each half-hour demonstration on museum preparations, a *vivâ voce* examination is held on typical recent specimens collected from the post-mortem room and operating theatre.

Valuable as is the instruction afforded by these systematic lectures and demonstrations, they must on no account be allowed to take the place of the daily demonstrations of Morbid Anatomy (Dr. Bryant and Dr. Fawcett, 2 p.m.) in the post-mortem room. Here a student gains information on the relative distribution

of morbid processes throughout the body, and learns to verify the accuracy of his observations at the bedside. No ward clerk must on any account neglect to follow the fatal cases to the post-mortem room, and throughout a student's career there is probably no more profitable way of spending an afternoon unappropriated to routine duty than in watching post-mortem examinations. It is not always possible to find time to hold the appointment of post-mortem clerk, but whenever it is the appointment should be held. The man who misses the opportunity while he is at the hospital of becoming acquainted with the many difficulties that may be encountered in making a post-mortem is sure to regret it afterwards.

The practical use of the microscope in solely pathological problems should be learnt as early as possible. With this object the course of Microscopical Pathology (Mr. Bellingham Smith and Mr. Pakes, Tuesday and Friday at 9 in the New Histological Laboratory) should be attended in the first winter session after the student gets into the wards. Here he will gain his first instruction in practical Bacteriology, which he will have constant opportunities of making use of in the wards. Here he will also amplify the knowledge he has already acquired, in the course of Normal Histology, of section cutting and staining, and have demonstrated to him the microscopical appearances of tumours and diseased tissues. A man cannot often find time to attend this course more than once, but he should attend it early in his career and work hard to learn enough about technique to enable him to afterwards examine specimens that constantly come in his way while holding senior appointments. Morbid histology and bacteriology are very engrossing studies, and many good men fight shy of them on account of the amount of time they fear they will "waste" over them. But a man of method can generally find a good many spare moments to devote to this work without seriously interfering with his reading, and he who acquires the hobby will find it a useful one to ride when he has accomplished his examinations and is waiting for patients.

BACTERIOLOGY.

The compulsory course in bacteriology forms part of that in microscopical pathology. This year, as last year, the first two months will be occupied with this subject. The rudiments of the science are taught; the methods of staining sputum, pus, etc., to demonstrate bacteria; the methods of collecting of morbid products for bacteriological investigation; in fact, the technique of the examinations which can be undertaken in the wards.

Two optional courses are also held. These form part of the course for the D.P.H. Examinations, but may be taken quite independently of that examination.

These begin in October and May respectively, and last for upwards of two months. This course consists of lectures and demonstrations which include the morphology and life-history of the pathogenic germs and the disease to which they give rise; the examination of morbid secretions and excretions, water, air, protozoa, etc.; susceptibility, immunity, etc. The students are instructed in the practical details of media making, culture, staining, etc., and they examine the more common pathogenic and non-pathogenic bacteria.

SURGERY.

Lectures are held three times a week, on Tuesdays, Thursdays and Fridays, in the anatomical theatre, by Mr. Howse (1.30) or Mr. Lucas (9.30). Mr. Howse for the first part will lecture on "General Surgery," commencing on Thursday, October 3rd. Clinical lectures are given on Wednesdays, at 1.30 in the anatomical theatre, by the surgeons. The first will probably be given by Mr. Howse, on Wednesday, October 2nd.

Mr. Dunn, six weeks before the final Conjoint examinations in January, April and July will hold "Revision Classes," upon which attendance is voluntary. Only those desiring to present themselves for examination are expected to attend.

Mr. Dunn will hold a course of "Operative Surgery" for final M.B. and Fellowship men in October, of which further notice will be given. The course for the requirements of the Conjoint Board will be held in January, 1902, and the fee of 10s. 6d. should be paid not later than December 18th. Names of students desirous of attending the M.B. course should be left at the medical office *before* the end of September. Mr. Higgens will lecture during January to March on "Ophthalmic Surgery," on Wednesday, at 3 p.m., in the ophthalmic operating theatre. The lectures must be attended after passing the second Conjoint examination before admission to the final Conjoint.

Mr. Jacobson holds a Clinical Class on Wednesdays at 2 p.m., in the large operating theatre, for the benefit of candidates for the Conjoint and other examinations in surgery. The classes have proved since their commencement a marked success, and should be attended by all students entering on their final examinations in surgery. We are informed, on good authority, that at least one other member of the surgical staff intends to hold similar classes during the winter session.

THE SURGICAL WARDS.

In the surgical wards there is a division of labour, and corresponding to this division, the appointments fall into two classes—clerking and dressing. The student's first introduction to clinical work is as a clerk in the surgical wards, and it is not unlikely that he may, on his first entry, be a trifle discouraged. The reasons for this are obvious. Entirely ignorant of surgery and even of the terms in common use, he is at once required to write full accounts of the cases admitted to the wards. He will find, however, that by paying attention to the advice we give him, that his difficulties will be found to be anything but insurmountable.

Being the junior appointment in the hospital, there is a tendency in the minds of some, and a little more than a tendency in the minds of others to belittle the

post. This is unjust, and is the result of ignorance of the real functions of the surgical clerk. What the medical clerk is to the medical side, the surgical clerk is to the surgical side. The post is junior in point of time, but does not necessarily carry with it any stigma of inferiority. Their duties are identical: the preparation of the permanent hospital records of the cases admitted to the wards. What difference there is consists in this: the machinery of the medical side is less complicated than that on the surgical; whereas the whole of the work in the medical wards falls on the clerk, in the surgical wards it has been found advisable to specialise and to separate—for the sake of greater proficiency—the duties of clerking and dressing. This separation has, on the whole, been justified by the results, the chief difficulty being the dependency of the clerk on the dresser for many details of importance. Dressers should, therefore, remember that from them the hospital expects such assistance as will render the reports as complete as they can be made. On the clerk, however, rests the responsibility, and the excellence of his reports is a sure indication of smooth working and mutual assistance in the firm to which he belongs.

The recent appointment of an overseer to each firm of clerks in the person of a clinical assistant in the surgical wards has been of inestimable value, primarily to the clerks, secondarily to the whole firm. The clinical assistant should be the immediate "ear" of all his clerks, to instruct them of their duties in the wards, also relieving the surgical registrar of many details in the filling in omissions of the reports of his firm.

We do not wish to exalt the clerk unduly, but to insist merely that in his work the same care and attention to detail, the same knowledge of surgery and human nature are as necessary as in other appointments. Let him bear in mind that to him is given by the hospital the task of keeping its records. These are bound and kept, and by his work thus perpetually in evidence a man is judged. Bad reports are a lasting disgrace; good reports a lasting honour. The importance of good careful work by the clerks cannot be over-estimated. In the nature of things it cannot be perfect, but it must be as perfect as he can make it. By his first work in the wards he will be judged, and he will find that it is very hard to live down a bad clerkship. At the same time that he bears in mind the difficulties and responsibilities of his post, he should remember that he is a junior, and that any assistance he can lend his seniors should be offered ungrudgingly, and in return for this he will undoubtedly meet with that consolation and help in his work which is so necessary. There is no loss of dignity sustained in carrying screens to patients, or in the thousand and one small opportunities which present themselves of helping the other workers in the wards.

To the dressers we would submit that the performance of dressing is no part of the clerk's duty, and that it is no kindness to him to request him to undertake what he cannot from his position with good grace refuse, and what nevertheless he is unfitted to do.

The work of the firm, as a whole, should be the interest of each individual member of it. Pride should be taken not only in its splinting and dressing, but also in its reporting. A good house-surgeon and a good dresser will see that the reports are not below the level of those of other firms, for as they represent the work of the firm the individual members should see that they give a fair and accurate idea of that work. The clerk, aided by the clinical assistant, from this point of view is to be regarded as the mouthpiece of the firm to succeeding generations. The firm should see that he represents it fairly.

The clerk, as soon as he is appointed, should find out from the surgical registrar to whom he is appointed. A few days before taking over the work he should learn from his predecessor what he can about the cases he is to take charge of, so that the work may be continued as nearly as possible without a break. At the present time there is an entire change of clerks every three months, but in the way indicated above, the break in the work may be obviated to some extent. He should learn quickly to take accurate temperatures, and pulse and respiration rates, and test urine, for without any exception the temperature, pulse and respiration rates, and condition of the urine must be included in the notes of every case on admission. The surgical registrar sees every new case with the clerk on the morning after admission, when he expects a history of every case to be ready. This, if vague, is useless. All symptoms should be set down in exact order, with the dates of their appearance. The exactness in detail is of the highest importance, and is a measure of the care with which the clerk has done his work.

He should have a note-book, and should put down in it everything about the case that he can obtain from the surgeon, house-surgeon, clinical assistant, and dresser. This should be copied into the report as soon as possible. We would impress upon each clerk the value of seeing everything done by the dressers or house-surgeons—the operations, putting up fractures, especially when done at night in take-in week, and this should apply to manipulations on every case under the surgeon, and not only to the cases which the individual clerk has to report—as much may be learnt in this way which otherwise can only later be gathered with much greater effort.

A new departure was made two years ago in the practical surgery classes, which are in the hands of the surgical registrar, who gives four courses a year, each beginning on the appointment of the new surgical ward clerks, and especially designed for their instruction in all matters relating to that appointment.

Lists of the duties appertaining to each appointment are supplied to the students, and these are to be carefully followed out. The hospital not only expects this, but insists on it. We have laid stress so far on the appointment of surgical ward clerk, as it is the first post that the student holds, and because he is so often quite unaware of the objects of the appointment.

He will in time become a dresser, and will by that time have learnt the traditions that underlie his office.

He should, before accepting office, have acquired most thoroughly the principles of aseptic surgery, and, on no account, ever depart from them subsequently. Let soap and water be his sheet anchor.

The surgical wards are visited every day by the surgeons and assistant surgeons at 1.45. Tuesdays and Fridays are reserved for operations, notice of which has been posted in the colonnade. The surgeons are assisted at the operations by the dressers, and no others should stand about the well of the theatre, the only exception being the particular ward clerk to the case. With due diffidence we should like to hint that the front seats reserved for the staff and for visitors were never intended to be used as a footstool. The habit of sitting perched along the front rail is one of recent growth only, and in the interest of the patient, the operator, and those watching the operation it is to be deprecated.

Although we believe there is no rule which prevents freshmen attending operations and clinical demonstrations, we would point out that such a course of action is useless to them, and is not encouraged by the authorities.

Finally, we should like to repeat that although specialization has provided a clerk responsible for the drawing up of the hospital records, yet as this report is an account of the work performed by the firm as a whole, it touches the honour of everyone in it that the report should be an accurate statement of the work done. The firm should be considered the entity, each separate member of which fulfils his own function, each at the same time being dependent on the others for the smooth, even working of the whole. S. R.

DAYS AND HOURS OF ATTENDANCE ON HOSPITAL PRACTICE.

Accidents and urgent cases of all kinds are admitted by the St. Thomas's Street entrance at any time of the day or night.

THE WARDS.

Medical Wards.—Dr. Taylor (2), Mondays, Thursdays and Fridays. Dr. Hale White (2), Mondays, Tuesdays, Thursdays and Fridays. Dr. Pitt (2), Mondays, Tuesdays, Thursdays and Fridays. Dr. Perry (2), Mondays, Thursdays and Fridays.

Surgical Wards.—Mr. Howse (1.30), Wednesdays and Saturdays. Mr. Lucas (1.30), Mondays and Thursdays. Mr. Golding-Bird (1.30), Mondays and Thursdays. Mr. Jacobson, Mondays and Thursdays. Operations (1.30), Tuesdays and Fridays.

Obstetric Ward.—Dr. Galabin (2), Mondays and Thursdays. Dr. Horrocks (2), Tuesdays and Fridays.

Ophthalmic.—Mr. Higgens (2), Fridays. Mr. Brailey (2), Tuesdays. Operations (2), Mondays and Thursdays.

THE OUT-PATIENT DEPARTMENT.

The days and hours of attendance in the Out-Patient Department of the hospital are as follows:—

Medical Cases.—Dr. Shaw (1), Fridays. Dr. Washbourn (1), Wednesdays. Dr. Bryant (1), Mondays. Dr. Fawcett (1), Thursdays.

Surgical Cases.—Mr. Symonds (1), Thursdays. Mr. Lane (1), Mondays. Mr. Dunn (1), Wednesdays. Mr. Fripp (1), Saturdays.

Obstetric.—Mr. Targett (1), Thursdays and Saturdays.

Ophthalmic.—Mr. Higgens (1.30), Mondays. Mr. Brailey (1.30), Tuesdays and Fridays.

Dental.—The Dental Staff (9), every week-day.

Aural.—Mr. Purves (1), Tuesdays.

Skin.—Dr. Perry (1), Tuesdays.

Throat.—Mr. Symonds (2), Fridays.

Electricity.—Dr. Bryant (1.30), Wednesdays and Thursdays.

DENTAL SCHOOL.

The dental student is supplied at the medical office with the Prospectus, Standing Orders, Notes on Probationary Work, List of Instruments, Calendar, and Clubs' Union Book.

If these pamphlets are carefully perused, he will become well acquainted with the general arrangements of the school, and the scope of the work upon which he will be engaged during his studentship.

It will first be necessary for him to purchase his instruments at one of the dental depôts, and to satisfy himself that he has been supplied with all of those described in the hospital list.

Probationary work upon the phantom head will occupy the freshman's time for about two months. This operative course is conducted by the staff demonstrators, and is very comprehensive. It includes most of the conservative operations that the student will subsequently perform on patients, namely, gold and other fillings, crowns, inlays, and the treatment of devitalized and septic teeth. If the manipulations upon the dummy are done in a thoroughly sound manner, a capital groundwork of operative dentistry will be acquired. It may be mentioned in passing that too much stress can scarcely be laid upon the necessity of becoming an expert operator, for the public are not slow to appreciate the highest manipulative skill.

The regulations of the Royal College of Surgeons of England require that dental students, who registered on and after January 1st, 1897, shall pass two professional examinations for the dental license. At the first professional examination certificates must be produced *inter alia*, of having been engaged in the practice of dental mechanics under a registered dental surgeon during a period of three years, and of having manufactured and adjusted six dentures and six crowns.

Inasmuch as it is recommended at Guy's that this examination be passed during the month of May, it follows that the work of the first winter session must be largely devoted to demonstrations, dental mechanics, metallurgy, and lectures.

If a student needs help or advice in his work he should consult the Dean, or a member of the Staff, any of whom will gladly do what he can for the best interests of the student.

M.

In the Medical Wards.

FOUR CASES OF ANÆMIA.

A CASE OF SPLENO-MEDULLARY LEUCHÆMIA.

Annie F., æt. 29 years, a married woman, was admitted into Mary ward, No. 50, July 22nd, 1901, under the care of Dr. Taylor, suffering from a swelling in the abdomen. She has five children all healthy. Her youngest child was born in June, 1900, and there was no unusual hæmorrhage at the confinement. When sixteen years old she suffered from "anæmia."

The history of the case was that she had not enjoyed her usual health during her last pregnancy, and soon after the birth of her child she noticed that her abdomen was larger than it had been and she suffered at the same time from slight pain in the left side. At this time the abdominal swelling was quite soft, and it remained so till six months ago when it became hard and larger. She had felt weak for some time and been short of breath and had suffered from indigestion.

Menstruation had been regular and normal, occurring every three weeks. A large tumour was felt occupying completely the left half of the abdomen and extending to the right five to six inches beyond the umbilicus into the right iliac fossa.

The right margin of the tumour was concave and notches were felt in it. It was dull on percussion, and its position varied slightly with respiration and with the posture of the patient.

Pulse 100; temperature 99·4°; respiration 24.

No enlarged lymphatic glands were felt. A systolic bruit was heard at the apex of the heart, and there was a venous hum in the neck, but no other abnormal signs were found in the chest. Her legs were thin, and she complained of slight tenderness over the lower part of the tibiæ. There was no tenderness or pain in the abdomen. The knee jerks were present and other reflexes normal.

There were no retinal hæmorrhages.

The blood was examined and the condition is shown in the table below. She did not appear anæmic.

Patient's condition was not materially changed until August 13th, when it was decided to extract two teeth that had been troubling her for some time.

After the extraction persistent oozing of blood from the sockets occurred, and great difficulty was found in stopping it. Various astringent mouth washes were tried. Supra-renal extract was applied locally and given internally. It bleached the gum but did not stop the bleeding. Eventually the sockets were plugged. The oozing, however, recurred directly the plugs were removed. In all they were plugged about four or five times but with only temporary benefit. The hæmorshage was finally stopped by the use of the following mouth-wash.

℞ Liq. Ferri Perchlor.
Glycerin a.a. ʒi.
Formalin (1 in 1000) ad. ʒi.

and the patient biting a pad of lint which had been soaked in the mouth-wash.

The bleeding extended over about ten days altogether. The effect of it was shown by the marked alteration in the patient's appearance and in the blood counts. She became much paler than she had been, but is now recovering somewhat. Her temperature, which before had seldom been above 100°, is now 101° to 102° every evening, and she sweats at night.

She has been treated with arsenic in gradually increasing doses, and is now taking Liq. Arsenicalis mix. three times a day. Latterly there has been a recurrence of the dyspeptic symptoms, and menstruation has not occurred for six weeks.

BLOOD ESTIMATIONS.

	Before Hæmorrhage.		After H'morrhage
	July 25th.	Aug. 10th	Sept. 5th.
Red Corpuscles, per cmm.	4,320.000	—	2,400,000
White Corpuscles „	179,429	—	168,000
Hæmoglobin	68%	—	25%

DIFFERENTIAL COUNTS OF LEUCOCYTES.
(500 counted.)

	Before Hæmorrhage.		After H'morrhage
	July 25th.	Aug. 10th	Sept. 5th.
Polymorphoneuclear ...	60·0%	73·4%	58·4%
Myelocytes	19·5	8·2	22·0
Small Lymphocytes ...	3·5	3·8	0·5
Large Lymphocytes ...	3·75	6·0	3·8
Eosinophiles	5·0	7·0	4·1
Nucleated Red Corpuscles	6·5	1·1	7·1
Basophiles	1·5	0·5	4·1
Eosinophile Myleocytes ...	·25	—	—

A CASE OF PERNICIOUS ANÆMIA.

Mary F., æt. 43, formerly a market gardener, now married, was admitted into Mary ward, No. 43, July 29th, 1901, under the care of Dr. Taylor, for general weakness.

She has had two children and the youngest is eight years old. Twelve months previous to admission she began to suffer from giddiness and fainting, noises in head, and pain in back and sides. She had never suffered from any gastro-intestinal disturbance, mental shocks, nor was there any history of hæmorrhage.

On admission.—Patient was very weak, and quite unable to walk. She was in a very neglected condition, covered with flea-bites, and had numerous pediculi. She was very pale, with a yellowish pallor, but she was not thin. The spleen was palpable about two inches below the costal margin, and felt hard. The liver was also palpable. The cardiac impulse was felt in the fifth space, half an inch internal to the nipple. A systolic bruit was heard in the pulmonary area and there was a loud venous hum in the neck. Her last menstrual period was seven months previous to admission. There was no tenderness of the bones. Her urine was of a pale

yellow colour, and was found to contain urobilin. The blood estimation showed—

Red corpuscles	... 647,619 per c.mm.	= 13 per cent.
White corpuscles	... 2,857 per c.mm.	= 38 „
Hæmoglobin	... ...	11 „

The blood films showed an extreme degree of poikilocytosis, megalocytes, microcytes and nucleated red corpuscles were seen. There was anæsthesia in the tips of fingers of both hands. There was œdema of both legs. No uterine trouble was found. Pulse 128, temperature 99·8°, respiration 36.

July 31st. The œdema of the legs had almost disappeared. She complained of a cough. Her retinæ were examined but nothing abnormal was found. She was very constipated.

August 5th. A few râles were heard just external to the angle of the right scapula.

9th. A systolic bruit was heard near angle of left scapula, at apex, in axilla and along left margin of sternum.

10th. Blood estimation showed 670,000 red corpuscles per c.mm. Hæmoglobin 15 per cent.

12th. Patient suffered from diarrhœa.

16th. The systolic bruit was most marked in pulmonary area. Patient was weaker.

24th. A triple rhythm of the heart could be heard, most marked at left margin of sternum. In the early hours of the morning her temperature went up, never having been previously above 101°, to 102·4°, and patient had a rigor, after which temperature fell to normal. At 6 p.m. her temperature reached 104·6°, and she had another rigor, the temperature again dropping to normal.

September 9th. Her condition has altered very little in the last two weeks, but she seems to be getting weaker. The blood estimation shows 562,500 red corpuscles per cmm. and hæmoglobin 12 per cent. She takes her food fairly well, but looks very languid. Her temperature since the rigor has not been above 99·8. She has been treated with arsenic, glycerine, extract of red bone marrow, salol and creosote.

Harry P., æt. 15, was admitted into John ward on August 1st, for slight pyrexia and enlargement of the lymphatic glands. He had always lived in England; there was nothing of importance in the previous history of the patient or of his family. The history of the present trouble was as follows:—On July 23rd he had dull aching pains in the neck, axillæ, and groins. He could feel nothing wrong in these places and is quite sure that there were no lumps there then. On the following day he noticed that lumps were beginging to grow in his neck; these were soon followed by others in the groins and axillæ, and all grew rapidly. During the week prior to admission he felt drowsy and "good for nothing."

On admission.—The temperature was 100·2°, pulse and respiration normal. Patient was a sturdy boy with a good colour. He had slight pain at the seats of the enlarged glands, otherwise he felt quite fit. The glands in the submaxillary, submental, occipital, cervical, axillary, and femoral regions were all large. The gland at the inner side of the elbow of either arm was also enlarged. The glands were slightly painful on pressure, hard, discrete and freely movable. They varied in size from that of a pea to that of a walnut. The liver and spleen projected two inches below the costal margin. Tonsils normal. The leucocytes numbered 12,500 per c.mm.

The diagnosis of glandular fever was suggested, but was untenable, as during the next few days the temperature dropped, but the glands remained large. The case was then thought to be one of acute lymphadenoma.

He was treated with arsenic in increasing doses, beginning with two and a half minims of Liq. Arsenicalis three times a day, and gradually increasing to nine minims, but this caused sickness and diarrhœa, nor was it more successful when given with Mist. Pot. Brom. The glands mostly remained about the same size, but it was noticed that the liver and spleen were increasing in size, and by August 27th they reached to the umbilicus. Another blood count was made on August 29th, showing red corpuscles 38,00,000 per c.mm. White corpuscles chiefly lymphocytes 43,750 per c.mm.

On September 1st, leucocytes numbered 48,400, and a differential count gave 95 per cent. lymphocytes and 4 per cent. polymorpho-nuclear eosinophiles. No coarsely granular eosinophiles or nucleated red corpuscles were seen.

As a result of this count the diagnosis was changed to lymphatic leuchæmia, seeing that most authorities state that in lymphadenoma the leucocytosis, if any, is slight, and is due to an increase of the polymorphic cells, not of the lymphocytes.

The patient's morning temperature remained normal, but in the evening it began to vary between 101° and 102°; but in spite of this pyrexia he felt well, and was allowed to go into the park every day.

2nd. As Liq. Arsenicalis was not being tolerated, the patient was put on a third of a grain of Cacodylate of Sodium three times a day. In this way he took an amount of arsenic every day equal to 60 minims of Fowler's solution, without the slightest toxic effect. By this date the liver and spleen reached below the umbilicus, and the epigastrium was greatly distended with the enlargement of these organs.

9th. Hypodermic injection of the cacodylate was commenced, as when given by the mouth it did not seem to influence the disease in any way; 1 grain dissolved in 16 minims of water and sterilised is now being injected every day.

10th. Leucocytosis numbered 126,000 per c.mm.

14th. Breathing noisy; swallowing difficult. Tonsils meet in the middle line.

15th. Patient had hæmoptysis, bringing up about 8 ounces of blood.

16th. Patient died.

At the *autopsy*, all the lymph glands were enlarged, and many contained hæmorrhages. Tonsils sloughing and hæmorrhagic. Hæmorrhages were found into the lung, thymus, pericardium. The liver was extremely enlarged and pale. The spleen was greatly enlarged and pale, and contained several infarcts.

Thomas Edward D., æt. 45, engineer's labourer, married, of healthy family. Previous illnesses, typhoid when 17; two attacks of lead colic when 28. Has led a temperate life, and has been strong and healthy until his present illness.

About eight months ago, while laid up for a week, as the result of an accident, he first noticed a firm, solid, abdominal tumour, reaching as low down as his umbilicus. He was then in good health. About four months ago he began to feel ill. He lost weight steadily, going down from 12 st. 6 lbs. to 10 st. 10 lbs. His legs swelled during the day, his appetite became poor, and his strength failed. His appetite subsequently improved, but the weakness increased, the swelling of the legs became more pronounced, and any exertion soon caused breathlessness. As a result he has done no work for two months previous to admission.

Admitted August 28th, 1901. Patient is of a dark complexion, anæmic, but not markedly wasted. The spleen is much enlarged, and reaches somewhat below the umbilicus. The liver is enlarged, reaching three fingers' breadth below the costal margin. Neither the liver nor spleen is tender, but there is some pain felt in the spleen when the patient moves suddenly, or receives a sudden jolt. No enlarged lymphatic glands have been found. There is a slight degree of ascites. On admission, there was marked œdema of both legs, which has disappeared with rest. The lungs are emphysematous. There is no cardiac enlargement, and the pulse is regular and of fair strength. The urine is normal.

A blood count shows:—White corpuscles, 277,500 per c.mm.; red corpuscles, 2,600,000 per c.mm. Hæmoglobin, 25 per cent. (Gower's hæmoglobinometer). Hæmoglobin value of each corpuscle is, therefore, about 50 per cent. of normal, if 5,000,000 red corpuscles per c.mm. be taken as normal.

A differential blood count shows, among 1034 leucocytes, 450 myelocytes, 502 polymorphonuclear cells, 76 coarsely granular eosinophiles, 6 lymphocytes. Calculated in percentage, this gives:—

Polymorphonuclear cells	...	48·5 per cent.
Myelocytes	43·5	„
Coarsely granular eosinophiles...	7·5	„
Lymphocytes	0·5	„

While counting 1034 leucocytes, 36 nucleated red corpuscles were observed. Most of these were slightly larger than normal. There have been no hæmorrhages.

The temperature is normal in the morning, and raised in the evening. During the first week after admission the highest evening temperature was 100·2°; since then it has always been between 100° and 101·4°.

Appointments.

MEDICAL SCHOOL APPOINTMENTS.

The following appointments have been made by the Medical Council and approved by the House Committee:—

Clinical Assistants.—Messrs. E. I. Claxton, A. C. H. Gray, H. K. Lacey, A. Wylie, A. Pearson, A. C. Ransford.

Clinical Assistant in Medical Out-Patients.—Mr. A. C. Osburn (Dr. Shaw).

Obstetric Dresser.—Mr. D. R. T. Griffiths (October 1st).

Dressers in the Throat Department.—Messrs. J. T. Dunston, T. C. Keates, M. J. Rees, A. H. E. Wall, R. C. Lawry, H. Barber.

Clerks in the Throat Department.—Messrs. P. P. Cole and G. Moir.

Assistant Surgeons' Dressers.—Messrs. J. T. Hicks, H. Johnson, F. C. Knight, H. E. Morris (Mr. Symonds); C. H. Bubb, C. R. Shattock, T. C. Lucas, W. M. Woodward, F. C. Robinson (Mr. Lane); H. B. German, H. Ackroyd, D. R. Pike, A. R. Brailey, A. R. Wilson (Mr. Dunn); C. E. Adams, G. F. Hardy, H. L. Shelton, H. C. Winckworth (Mr. Fripp).

Medical Ward Clerks.—Messrs. C. H. Dawe, R. Moyle, J. Bromley, H. D. Smart, C. N. Reinhold, H. W. Bethell, R. Larkin, N. I. Spriggs, H. Wallis, E. L. Ward, J. W. Dadd, P. R. Bolus, F. P. Hughes, C. E. Iredell, H. Mann, P. A. Peall, C. D. Pye-Smith, M. B. Taylor, R. Willan, H. O. M. Beadnell, C. S. Morris, K. Black, S. C. Bowle, G. Carlisle, F. G. Goble, B. W. Lacey, E. H. Milsom, J. F. Rey, W. T. Meade-King, B. I. Rahim, H. Watts, J. Goss.

Surgical Ward Clerks.—Messrs. A. M. Webber, R. G. Seagrove, F. B. Lowe, H. H. Carter, A. E. Kynaston, M. G. Louisson, G. H. Rees, G. Russell, B. Moiser, M. J. Mottram, R. P. Rowlands, B. H. Stewart, H. H. Jenkins, G. C. F. Robinson, H. F. B. Walker, L. H. Frankenberg, G. A. Ticehurst, E. Lloyd, R. A. Greeves, L. J. Orpen, D. V. Payn.

Aural Surgeons' Dresser.—Mr. A. C. Osburn (November-December).

Assistant Surgeons' Clerk.—Mr. J. S. Cooper (Mr. Dunn).

Post-mortem Clerk.—Mr. A. Moon (October-November).

CIVIL.

BRODRICK, CHARLES C., L.R.C.P., L.R.C.S. Edin., has been re-appointed Medical Officer of Health of Tavistock.

CLARKE, ASTLEY VAVASOUR, M.D., B.C. Cantab., has been appointed Physician to the Leicester Infirmary and Fever House, *vice* J. Headley Neal, deceased.

PIKE, NORMAN H., M.B., B.S. Lond., has been appointed District Medical Officer of the Dewsbury Union.

MILITARY.

Lieutenant-Colonel H. J. W. BARROW, R.A.M.C., has been appointed Principal Medical Officer Sirhind District.

Passim.

With the coming in once more of October, Guy's will, for a number of those who have chosen medicine for their profession, begin to be the scene of their studies and interests. To many of us it is now a familiar scene of work; as dear, too, as it is familiar. Cordially, therefore, do we welcome those who now come amongst us, hoping that for them the years spent at Guy's may prove both a congenial time in their lives, and full of real work, with many successes as the result.

Every institution naturally has its own social and intellectual atmosphere, which is caused to a large extent by past traditions being adhered to and perpetuated by the men who for the time belong to it. And it is into this social and intellectual life at Guy's, that so many of us have found both helpful and agreeable, that we would now receive those who are freshly associated with us.

Mr. Collier, who for so many years has held the office of Head Dispenser to the hospital, has at length been compelled to retire through failing health. Everyone who has met Mr. Collier will much regret that he has been forced to abandon the work in which he took such a keen interest. To the men of late years he is only known as the genial head of the dispensary and as an instructor in the dreaded subject of materia medica: but many Guy's men of former generations were coached by Mr. Collier for the chemistry examination of the Conjoint Board. A few months ago we were all grieved to see him looking so sadly; but, relieved from the extraordinary pressure of work to which he was subjected, we are happy to say that he has to a large extent recovered, but not sufficiently to continue his work at Guy's. Mr. Collier displayed such zeal in his work here, and was always so pleased to render help when asked, that, now that he leaves us, he will carry with him the best thanks of all that knew him, and the hopes for the best health to enjoy such a well-earned rest. Mr. Finnemore, M.P.S., succeeds Mr. Collier, and to him we tender our congratulations on his appointment.

Sir Samuel Wilks, we learn, is giving up his town house, and in making his arrangements for removing to the country, has, with his usual thoughtfulness for the welfare of the hospital, presented several pictures which will be most interesting to all Guy's men as records of the Staff in former years. Among them is a portrait of Dr. Babington, a series of photographs of the members of the Staff in 1868, and numerous old prints of medical interest. For the present they will find a resting place in the Treasurer's office.

The rumour which the Surgical Registrar mentions in his contribution to this number of another class in clinical surgery being formed, is good news. Only recently we spoke of the great value of this form of teaching, and there can be no doubt an additional class will be eagerly attended by the men. It seems a pity that the medical side has allowed itself to be so outstripped in this matter; of course there are excellent opportunities for clinical work of this kind at medical out-patients, but at a considerable sacrifice of time, and when a man is just about to face the examiners he can ill afford an afternoon for the chance of seeing two or three good cases. He wants a concentrated extract of medical out-patients given to him in the form of a class.

It is important that the Annual Dinner, which will be held next Tuesday evening, with Dr. Pye-Smith in the chair, should not be forgotten. The gathering is a most useful and pleasant social function, and makes a good opening to the winter session.

We would also remind men that the opening meeting of the Physical Society will be held on Saturday, October 5th, when S. W. MacIlwaine, Esq., will read his paper on "An attempted Definition and Classification of Diseases on the basis of Causation." We hope every man will do his utmost to make the meeting a striking success. Freshmen may note that at this meeting they

will have an opportunity of inspecting many of the books and instruments which they will need later in their hospital work.

Now that a new installation of telephones is being laid on to various parts of the hospital, may we suggest that the post-mortem room should be added to the places already fitted? At present there are numbers of men who are simply waiting with nothing to do, who would attend this most valuable department from an educational point of view could they be rung up when required. This want is chiefly felt by the men on duty—particularly the Clinical -who, if he cannot persuade someone else to do his work, is debarred from attending, as there is no one that can be despatched to call him.

WHILE on the subject of improvements, could not instructions for the making of albumen water be issued on printed slips for use in the Front Surgery and at Out-Patients? These might be added to the present slip with directions for feeding infants, or, better still, printed on a small separate paper. During the summer months countless babies that are brought up are ordered this food, and much time and patience are expended in detailing its preparation, often, we are sure, in vain. Printed directions would save much time, and would ensure as far as is possible the correct article being given.

WE would most heartily congratulate Messrs. F. G. Gibson and D. Forsyth on their elevation to the dignity of house-physicians, and Messrs. C. H. Glenn and H. McD. Parrott, who have been appointed house-surgeons, and Mr. P. W. L. Camps, who has been made resident medical officer in Bright ward.

LAST week another competition took place for the Tug-o'-war Cup, presented by Mr. Lucas. As the Leucocytes scratched there was only one tie, and in this the heavy team of the Howse firm easily defeated the Jacobson firm, pulling them over twice in succession. Interest in the competition has sadly lagged of late, and the excitement which reigned over the early contest, the midnight training and scuffling in the park, the publication of weights, and all other functions are no longer the serious matter that they were two years ago, when the ardour of one of the teams was such that they matched their strength against our biggest tree, happily without avail.

WE must draw attention to the letters of the captains of two branches of the Football Club, calling on new men to come forward and offer their services. Information regarding trial matches will be posted shortly, both on the notice board in the colonnade and in the smoking-room. All new men should at once put their names down, as it is at these matches that the freshman has the best chance of his play being seen by those who pick the various teams, and consequently getting a trial for the hospital should he be worthy. It is said that some men have never played football at the hospital because they have not been asked. Notices of trial matches and invitations to new men to play are posted, and every man that puts his name down will be given a chance. It cannot be expected that the secretaries of the various clubs can go round and beg each man to play as if asking a favour.

IT is a tradition at Guy's, and an extremely good one, and one which must be strictly adhered to, that the hospital team has first call on the services of its men. Freshmen may belong to other clubs, and consider their claims first; but when they have been long enough here to know the *esprit de corps*, which has done so much for Guy's in football, as in other branches of hospital life, they will realise that this principal is correct. So to all men we say that, if they are asked to play for Guy's, play they must, in spite of belonging to another team. And to those that cannot play at all, be interested in the teams, which do credit to the hospital to which you belong, and show your interest by putting in an appearance at all the matches you possibly can, and be as regular at the Cup Ties as you hope to be at lectures. Although you will not be signed up for these attendances, you will do something towards becoming what we trust is the aim of all our men, a good sportsman.

THERE are always some who think that this earthly strife is so short that "they have not time" to attend to such frivolities as sport when the serious vista of the medical curriculum is before them; but if an answer is required Circumspice. They will see many of Guy's men holding prominent positions on the Staff and elsewhere who served the hospital as well on the sports ground as in the wards, and many names may be mentioned that showed as prominently in the exam. lists as in accounts of matches. Many a good man has failed to do himself justice at his work simply because he thought time wasted which he spent in physical exercise. The latter is wanted by no one more than the student of medicine, and the man who starts life at the hospital by neglecting it will rue the day at a later period of his career.

SOME time ago the question of increasing the number of lockers outside the hospital library was raised. We understand that a plan for providing an additional 150 was adopted, but no actual step was taken to carry out the idea, and here the matter seems to have ended. Undoubtedly there is an urgent need for better accommodation; at present only men holding the appointment of dresser can be supplied, other men have to leave their books, hats, etc., to take their chance deposited in various corners of the library. That this chance is by no means a certain one is proved by the mysterious disappearances that rather frequently occur. Then, again, the crowding of the library with coats and bags is in itself a great nuisance to frequenters of the room. We hope that soon some definite move will be made to remedy this evil.

Papers by Guy's Men.

Some Remarks on, and Suggested Amendments to, the Habitual Inebriates Acts. By L. A. Parry, M.D., B.S. Lond., F.R.C.S. Eng.—*The Lancet*, 21st September.

Pneumococcus Peritonitis. By J. H. Bryant, M.D., F.R.C.P. (with Charts).—*British Medical Journal*, 21st September.

Two Cases of Swelling of the Eyelid occurring after a Bath. By Theodore Fisher, M.D. Lond.—*The Clinical Journal*, 4th September.

The Evolution of Modern Physiology.

A paper read before the Guy's Physiological Society by Mr. PERCY R. BOLUS.

MR. PRESIDENT AND GENTLEMEN,—I feel that it is a great honour to be allowed to address the first meeting of the "Guy's Hospital Physiological Society." It was for this reason that when your Secretary asked me to read a paper on this occasion, I could not muster enough modesty or shame to refuse so tempting an offer. And so I can but ask you to overlook the many shortcomings of this discourse, and to accept the desire to write an interesting paper for the deed.

In dealing with so wide a subject as the "Evolution of Modern Physiology," one can only hope to catch a brief glimpse of the master workers in the science.

The earliest records of physiological thought which we possess belong to the Greek School.

Pythagoras, who was born at Samos in B.C. 584, is held responsible for one of the most mystic theories that man has ever devised.

Pythagoras considered that numbers were the first and essential elements of life. The monad, as the source of all things, represents the Deity, while an abstract idea is merely a number, and a material object the symbolic presentation of a number.

The soul, says this philosopher, consists of two parts, of which the "rational" half resides in the brain, while the "animal" half has its seat in the heart. The soul is composed of light particles which permeate the atmosphere, and each man's share is inhaled at birth.

The next scientist of whom we have reliable information is Hippocrates, who had been well called the "Father of Medicine." He was born in B.C. 460.

Hippocrates was a keen observer and a shrewd man. With him rests the suggestion of consultations, for he writes:—"A physician should not be ashamed to call in the aid of another physician to see a difficult case." He also made all doctors swear an oath, "To live chaste lives, never to injure their patients or cause them pain, never to procure abortion, and not to divulge professional secrets." Add to these modern notions the fact that Hippocrates recognised the critical days of fevers, practised auscultation and bleeding, and valued opium, elaterium, and many other drugs now in constant use; and one begins to think that this great man lived 2000 years in advance of his time.

On the other hand, we find him dividing matter into four elements—earth, air, fire and water. The body, too, is said to contain four humours, which are derived from these elements, and inflammation of a part is the passage of blood into tissues which contained none of it before.

Hippocrates did not dissect and had no accurate knowledge of the arrangement of the body. The "Father of Medicine" was the first to point out that medicine is the offspring of physiology, that we must be acquainted with the normal in order to treat the abnormal.

Empedocles, a Greek philosopher and poet, was born in Sicily in B.C. 460, the same year in which Hippocrates saw the light.

Empedocles lent his support to the theory of four elements, and also considered that friendship and hatred act as attracting forces amongst them. He imagined that life is due to chance. Yet this ancient Greek dreamer distinctly foreshadows Darwin's famous theory of "Survival of the fittest." "The world," says Empedocles, "was peopled by many races of monsters and many tribes of imperfect beings, until, by chance, a creature arrived who was sufficiently adapted to survive." Legend hath it that Empedocles cast himself into the crater of Vesuvius in order to be thought immortal. Matthew Arnold's beautiful poem (Empedocles on Etna) aptly illustrates the theories in vogue at that period. He is made to say:—

"To the elements it came from
Everything will return
Our bodies to earth
Our blood to water
Heat to fire
Breath to air
They were well born: they will be well entombed."

And again:—

"Leap and roar, thou sea of fire
My soul glows to meet you
Ere it flag, ere the mists
Of despondency and gloom
Rush over it again
Receive me, save me!"

The immortal Plato next claims our attention. He flourished in Athens about 400 B.C. Although more interested in the physiology of the mind, Plato had some idea of the arrangement and structure of the body.

He divides the soul into three parts. The first part, which possesses the power of thought, resides in the brain. The second portion, which is the origin of all motor impulses, has its seat in the heart, while the animal affections, as forming the lowest third, dwell in the bowel.

In the third century B.C. Aristotle made confusion worse confounded by yet another theory. Aristotle looks on the essential condition of life as the natural fire in the heart. This flame can be extinguished either by over-heating or by excessive cooling. Hence the two fundamental necessities of life are fuel and cooling. The fuel, Aristotle tells us, is represented by our food, while respiration is the mechanism for cooling the vital flame. Aristotle seems to have a weakness for the heart, for besides accommodating the natural fire, it is also the seat of perception, and manufactures the blood. The blood is said to enter the veins, the arteries being used to convey the vital spirit. This error, with regard to the path of the blood is, of course, due to the fact that after death, the arteries are found empty of blood, the veins engorged. Aristotle seems to have anticipated the advice of the modern satirist:—

"Singing in the wilderness
Of suppositions palpably untrue.
'Tis all he needs; he is content with these
Not facts he wants but soft Hypotheses
Which none need take the pains to verify."

for he is distinctly weak when he does condescend to chronicle stubborn facts. Thus, he tells us that men have more teeth than women, and he is not fortunate enough to strike the correct number in either estimate. In another place he says that, warmth being one of the conditions of life, people live longer in hot climates.

We have now finished our review—a mere lightning sketch—of the great teachers of the Greek School. They did little to increase our store of knowledge, they have bequeathed us no important experiments. Mind had more attraction for them than matter. Nevertheless we owe them much; for the Greeks were the first to show that a study of physiology is essential to any philosophic system or mode of thought.

While the Greek School was stagnating, a zealous band of physiologists collected at Alexandria under the patronage of the second, third and fourth Ptolemys. These scientists were allowed to use the dead bodies of criminals, and by this means, Erasistratus obtained a fair notion of the nervous system. Herophilus, who lived at Alexandria in B.C. 280, made some observations on the pulse, and discovered the lacteals running from the gut. In all probability the Alexandrian school (400 to 200 B.C.) possessed far more knowledge than existing records show, for we read that they had special physicians for the eye, for the teeth, for the head, and for internal diseases.

The two centuries before Christ, and the first of this era, were a dark age for physiology as well as for all other sciences.

The next figure on our canvas is Galen, whose span of life extended from 130 to 200 A.D. Galen was the first physiologist to give prominence to experimental research. His genius, zeal, and eloquence, made him a great power in the scientific world.

Galenus, like Plato, divided the functions into three divisions which we may call vital, voluntary, and natural, The vital processes are essential to life and occur in the heart. The voluntary functions, which are mostly subject to the will and can be suspended without injury, are derived from the brain. The liver is the abode of the natural processes, and these go on without consciousness or control.

Galen noticed the pulsation of the brain, and he accounts for it by saying that the dura mater pulsates in order to suck up the vital spirit by the arteries from the heart, through the cribriform plate. The pulsations also served to drive on the animal spirit which proceeded downward to move the muscles and stimulate the soul.

The inhaled air, according to this observer, proceeds from the lungs to the heart and thence to the arteries, but he showed that the arteries also contain blood in the living subject.

In his work "De locis affectis," Galen describes the effect of hemisection of the cord in young pigs and monkeys. He correctly notes the unilateral paralysis

and anæsthesia caused behind the lesion. We also read of the destruction of voice by section of the recurrent laryngeal nerve, and of the motor paralysis following section of the nerves to voluntary muscle.

Galen also threw much light on the function of the kidney and of the bile-duct.

After Galen, we pass into that sea of darkness known as the medieval period. Between the second and the sixteenth centuries we find nothing but speculation. No research undertaken, no advance in knowledge. Hypotheses of the wildest nature, madness without method, held the field. The spirit of science, it is true, lingered in Arabia during much of this period, but although the Arabians added much to our knowledge of pharmacy, and something to the science of medicine, true physiology profited little by their efforts.

Let us then select one or two of the greatest characters of this benighted era and see what manner of men they were.

Van Helmont explained life as the effect of an intelligent being or "archaeus," which had its seat in the epigastrium. He was a faith healer of the deepest dye, and considered that the fiery eyes of the physician needed but to glance at the patient to effect a complete cure.

Paracelsus, who was by a great deal the most eminent scientist of his age, was born at Zurich in 1493.

The full name of this king among quacks is, Philippus Aureolus Theophrastus Paracelsus Bombast von Hohenheim. It is unknown which of these appellations really belonged to him. He liked Theophrastus best, and writes "Naturae et baptismae jure Theophrastus nominor." But he pays so little regard to truth that we can hardly accept his word, even in so trivial a matter as this. After studying alchemy and astrology, Paracelsus started a wandering life, gathering information alike from scientists, conjurers, and mysterious old women.

Having gained considerable reputation by curing certain diseases by the use of metals, he was appointed to a professorship at Basle. Up to this time all lecturers had been compelled to follow the works of Galen and to adopt his philosophy. Paracelsus gathered the students together for his first lecture, and proceeded to make a fire of sulphur before him. Into this he cast the works of Galen, exclaiming, "Sic vos ardebitis in Gehennâ." How the calm spirit of Galen must have smiled across the ages!

Paracelsus believed in the animation of all things, and states that minerals feed and are subject to disease. He wrote in very bad Latin, and some of his sentences still defy translators. The mighty Theophrastus had the misfortune to quarrel with the magistrate of Basle concerning the professor's fees. Paracelsus was forced to leave Basle; he took to living in taverns and wandering aimlessly about Europe. And so it came about that he who boasted that he possessed the philosopher's stone and the elixir of life, died in abject poverty at the age of 48. "Sic transit gloria mundi."

As a last example of medieval physiologists, we will consider Descartes (1596 to 1650). He built up theories of automata and animal spirits.

After considering the nature of reflex actions, he concluded that these travelled through the pineal gland! Being persecuted by the Church on account of his philosophical opinions, Descartes fled to the Court of Christiana, Queen of Sweden. But even here, Descartes was destined to become a martyr to science. For the queen insisted on his joining her studies, often at 5 a.m. and the strain proved too much for his delicate constitution.

The next writer with whom we are concerned is Vesalius, the pioneer of human anatomy. He and his merry men climbed the gibbet, dug up graves and resorted to every variety of body-snatching. By careful and painstaking dissection, Vesalius established at last a fairly accurate idea of the structure of the body. With regard to the brain and alimentary canal, his knowledge was correct and detailed, and in the list of muscles which he made, but few are omitted. Vesalius eventually became a martyr to his life-study. In 1563, he was charged by the Inquisition with dissecting a Spanish gentleman while alive, and ordered to go to Jerusalem as a penance. On his return he was shipwrecked, cast among savages and killed. The value of his work is beyond dispute. It is the very foundation of modern physiology.

The seventeenth and the early part of the eighteenth centuries may be regarded as the period of infancy of latter-day physiology. Many and able were the workers during this time, and we owe them much. With a few exceptions, such as Harvey, Malpighi and Boerhaave, they have escaped fame. Let us recapitulate the more important work of some of these heroes of long ago.

Harvey, the renowned discoverer of the circulation, was born at Folkestone in 1578. His style may be judged from the following quotation, taken from "An Anatomical Dissertation on the Movements of the Heart," chapter i. —

"When first I gave my mind to vivisections as a means of discovering the movements and uses of the heart, and sought to discover these from actual inspection and not from the writings of others, I found the task so truly arduous, so full of difficulties that I was almost tempted to think that the movement of the heart was only to be comprehended by God. For I could neither rightly perceive at first when the systole and when the diastole took place, nor when and where dilatation or contraction occurred, by reason of the rapidity of the movement which in many animals is accomplished in the twinkling of an eye, coming and going like a flash of lightning; so that the systole presented itself to me now from this point, now from that—the diastole the same; and then everything was reversed, the movements occurring, as it seemed, variously and confusedly together."

Having noticed that most of his difficulties were avoided by examining the heart when it is beating slowly, as at the approach of death, Harvey traces the sequence of the cardiac contraction, and proceeds to give the following account of the ventricular systole :—

"1. The heart is erected and rises upward to a point, so that at this time it strikes against the breast and the pulse is felt externally.

"2. It is everywhere contracted, especially towards the sides, so that it looks narrower, relatively longer and more drawn together.

"3. The heart being grasped in the hand becomes harder. This proceeds from tension and may be compared to the sensation on grasping the forearm while the fingers are being moved.

"4. In fishes and cold-blooded animals, such as frogs and serpents, the heart when it moves becomes paler, when it is quiescent, a deeper red."

The scheme of the circulation was suggested to Harvey by the obvious function of the valves. It is interesting to note that his practice fell off considerably after the publication (1628). No physician over forty believed in the discovery. As physician to James I. and Charles I., Harvey was compelled to take an active part in political affairs, and during the Civil War his house at Oxford was plundered by the Roundheads, and many unpublished papers burnt.

Another important work of Harvey (who wrote in good Latin) is his "Exercitationes de Generatione," for in it we find the first arguments against spontaneous generation. The derivation of all animals from an egg is maintained, and the process of fertilisation detailed in the case of the deer and the fowl.

Throughout Harvey's time many other experimenters were investigating various branches of physiology. Thus, in 1622, Asselius discovered the complete course of the lacteals from the gut *via* the thoracic duct to the blood.

Willis, who flourished in 1650, studied the nervous mechanism of reflex actions. He it was who first assigned different functions to different parts of the brain.

Ruysch, a Dutch scientist, first injected bodies with coloured wax at about this time.

To Malpighi, who was born at Bologna in 1628, belongs the honour of founding the study of Histology. He demonstrated the capillary circulation in the lung, bladder and mesentery of the frog. The minute anatomy of skin and secreting glands, and the structure of the tongue and of blood were elucidated by Malpighi, who also threw much light on the respiratory process.

Other writers of this period (1650–1750) include Hoffmann, Stahl, Berkeley and Boerhaave. The two first-named contributed little of value to physiology, Bishop Berkeley still less, but Boerhaave is of sterner stuff.

Berkeley (1684–1753), as regards tone of mind, belongs to the ancient Greek school of physiologists. He has the same originality, the same taste for theology, the same contempt for experiment and observation as Plato.

Berkeley, starting from the statement that we know of no matter apart from our perception of it, gradually works round to the theory that matter is non-existent. His "New Theory of Vision" is less fanciful. In this work he states that our appreciation of distance is due to the image on each eye being slightly different.

Dr. Boerhaave occupied the chair of Physiology at Leyden. He was a bold experimenter and a neat theorizer. Boerhaave wrongly considered that the coucha of the ear acts as a parabolic reflector to direct sound vibrations into the meatus.

The following account of one of Boerhaave's investigations is from his "Elementa Chemiætom I." (as quoted by Hales):—

"Having caused a sparrow to be put into a sugar-baker's drying stove, the heat of which was so great as to raise the mercury in Fahrenheit's thermometer to 146 degrees, the sparrow, after about a minute, expressed great uneasiness and died in seven minutes. A cat also put into the same stove, expressed great uneasiness in one minute and died in about 16 minutes: it was as wet with sweat as if dipped in water. But a dog which was put in at the same time did not sweat; after seven minutes he panted much for breath, and in a quarter of an hour expressed very great uneasiness, soon after which he grew faint, and died in 28 minutes. He drivelled all the time a great quantity of red foam, which did stink so intolerably that a strong labouring man who went near it was almost struck down in an instant with this stench."

From Boerhaave we proceed to his pupil Haller. The disciple, indeed, excelled his master, and has been justly styled the father of modern physiology.

I propose, gentlemen, to deal, in as much detail as the time allows, with the works of Haller and of his contemporary, Stephen Hales. I think you will agree with me that these two eminent physiologists, both as regards point of view and method of investigation, must be classed with the modern school. And with the introduction of this phase our task is ended.

Dr. Haller (1708 to 1777) physician to George II., was lecturer on medicine, anatomy, surgery and botany, at the University of Gottingen. He refused to leave this somewhat arduous post, even when offered a large salary, with no duties attached, by Frederick the Great, His most important work is the "Primæ Lineæ Physiologæ," published in 1747.

Haller was the first observer to perceive that the changes in various tissues are not entirely analogous, in other words, that every tissue has its "vie propre."

Vital phenomena he made to include two qualities, sensibility and irritability; sensibility being a fundamental property of brain and nerve. By irritability, Haller means nothing more than power of contraction, so that this quality is confined to muscle. He divides muscle into voluntary and involuntary varieties.

The pulsation of the brain is shown to be of respiratory and cardiac origin.

Haller classified odours as:—1. Sweet. 2. Foul. 3. Those that are neither sweet nor foul. This arrangement has at least the merit of being physiological.

Among many other points made by Haller we may mention that he was the first experimenter who obtained

recovery after removal of the cerebellum. He originated the idea that the stimulus of the blood causes the heart to beat, and he showed that stimulation of tendons or deep viscera is not attended with pain.

The Rev. Stephen Hales (1677 to 1761) was Curate of Teddington.

He was a bold experimenter, and his conclusions are extremely logical. His ideas nearly always tended towards practical applications, such as ventilation, the preservation of meat, and the distillation of salt water.

Hales settled, once and for all, the vexed question of reflex action, by showing that the usual reflex effect on stimulating the skin of a decapitated frog is no longer obtained after removal of the spinal cord.

The most famous physiological work of this writer is his "Hæmastatics," which was published in 1733.

The following is an extract from the preface to his second volume of Statical Essays:—

"It is not within the compass of human understanding to assign a purely speculative reason for any one phenomenon in nature. So that in natural philosophy we cannot depend on any mere speculations of the mind; we can only, with the mathematicians, reason with any tolerable certainty from proper *data*, such as arise from the united testimony of many good and credible experiments. Yet it seems not unreasonable, on the other hand, though not to indulge far, yet to carry our reasonings a little further than the plain evidence of experiments will warrant; for since at the utmost boundary of those things which we clearly know, there is a kind of twilight cast from what we know on the adjoining borders of the Terra Incognita, it seems therefore reasonable in some degree to indulge conjecture there, otherwise we should make but very slow advance in future discoveries either by experiments or reasoning."

This passage clearly shows that Hales' line of thought and style of deduction are precisely those in vogue at the present day.

As regards apparatus and instruments, the moderns have, of course, made immense improvements. So that it makes us smile to think of Hales' fixing a musket barrel to the pulmonary vein, even in a horse. And yet many of the observations of Hales' time show great accuracy, *e.g.* the estimate of the number and size of red blood discs is the same in Hales of 1733 as in Starling of 1901.

I cannot resist the temptation of reading you the beginning of Hales' account of how he took the blood pressure in the crural artery of a mare — the most renowned physiological experiment, perhaps, of all time.

"In December I caused a mare to be tied down alive on her back. She was 14 hands high and about 14 years of age; had a fistula on her withers; was neither very lean nor very lusty. Having laid open the left crural artery about 3 inches from her belly, I inserted into it a brass pipe whose bore was $\frac{1}{6}$ of an inch in diameter, and to that by means of another brass pipe which was fitly adapted to it, I fixed a glass tube of nearly the same diameter, which was 9 feet in length; then, untying the ligature on the artery, the blood rose in the tube 8ft. 3in. in the perpendicular above the level of the left ventricle of the heart, but it did not attain its full height at once; it rushed up about halfway in an instant, and afterwards gradually at each pulse 12, 8, 6, 4, 2, or sometimes 1 inch. When it was full, it would rise and fall at and after each pulse 2, 3, or 4 inches."

On pages 48 to 56 in this volume we find some very valuable remarks on blood-pressure and blood-flow. The method used consists in slitting up the gut of a dog on the side opposite the entrance of the mesenteric vessels, and cutting the aorta near the heart. A definite volume of fluid at known pressure is then run into the cut end of the aorta and the time taken for the fluid to reach the gut noted. The experiment is repeated with different fluids, and the effect of cutting the arteries at various points is shown.

Hales never forgets his profession. He is a clergyman first, a physiologist afterwards. Thus, after giving an account of his experiments to test the strength of arteries and veins, he goes on to say:—

"We see in these instances the great strength of the coats of these vessels; what great reason have we, therefore, with thankful hearts to say to our Creator, as holy Job did when he contemplated on the wonderful frame and strength of his body (Job x., 11): 'Thou hast not only fenced me with bones and sinews, but hast also effectually secured the vital fluid in such strongly wrought channels as are proof against its most lively and vigorous sallies, when either agitated by the different passions or by strong or brisk actions of the body.'"

Thus again, when Stephen Hales the physiologist has just completed his observations on the action of brandy on capillary vessels, Stephen Hales the parson steps forward and declaims on man's wickedness in these words:—

"Hence it is that the unhappy habitual drinkers of brandy and other distilled spirituous liquors, do so insatiably, from time to time, thirst to drink of that deadly liquor, which by often heating the blood and contracting the blood-vessels, does by degrees reduce them to such a cold relaxed and languid state, as most impetuously drives them to seek for their relief in that liquor which they too well know, both by their own experience as well as by the daily destruction of thousands, to be so very baneful and deadly as to become by the great abuse of them the most epidemical and destructive plague that ever befel mankind."

And now, gentlemen, my time is up and we must gently leap from the eighteenth to the twentieth century.

I thank you for your courteous attention to this paper. If I have awakened any spark of interest in the old-time worthies of whom we have been speaking, I am not unrewarded. You will, I am sure, never regret any spare moments which you may devote to those who, long since

> "Sailed into the purple vapours
> Sailed into the dusk of evening
> To the land of the Hereafter."

In Lighter Vein.

Once more boyish laughter fills the smoking-room; the colonnade echoes with the tramp of childish feet.

Ah! fair youth, in spite of the careless swagger, the large pipe, the impossible collar, we know you.

That ruddy cheek has never tasted the delirious pleasure of the dissecting-room; that laughter is not the outcome of physiological research.

You stare in wonder and pity at the careworn, muffin-like faces of we old birds.

Only wait, my boy, just wait.

The fact that you have chosen Guy's is a very strong point in your favour.

Situated amidst magnificent scenery and luxuriant foliage, eight hundred feet above level of the river, Guy's Hospital affords a climatic excellence equalled by few hydros.

Bathed in perpetual sunshine, the student joyfully performs his allotted task. It seldom rains, and fogs are quite unknown. The air is filled with sensuous perfumes; the hum of innumerable insects lulls the ear.

There is excellent small game shooting in the neighbourhood, with plenty of good cover, and within the precincts of the hospital a *dear* forest. This is strictly preserved for the senior students and resident staff, but junior members can go and watch the fawns at play.

From a social point of view Guy's is without a rival. Amongst the dwellers in the mansions around there is a plentiful sprinkling of blue blood (and blue noses—ED.). The strong, brave men, the beautiful black-eyed women, using a language full of poetical expressions, infuse into our life the glamour of romance which is in itself elevating.

Within the hospital the social status is simply staggering. Do you realise that you may breathe the same air with one who hob-nobs with kings? When you have grown bigger and stronger he may possibly converse with you.

The commissionaire, in spite of his gorgeous uniform, will converse most affably with you, and when you know him better he may allow you to place an offering at his shrine.

Lastly, if you make the most of these opportunities, who knows but that one day you may enjoy the friendship of

THE BIRD OF PREY.

Novelties.

SILK SUTURE FORCEPS.

The chief objection to the use of silk for ligatures or for buried sutures is the comparative frequency with which the silk becomes infected and gives rise to troublesome sinuses, and stitch abscesses even after careful sterilisation of the silk. There is no doubt that in the majority of cases that this occurs from contact with the hands of the operator or his assistants, especially when tying knots, threading, needles, or drawing sutures tightly. In these cases the silk is likely to rub off the superficial epithelial cells, and become contaminated by micro-organisms which are found in the lower epithelial layers, even after careful sterilisation of the hands. Hence silk sutures or ligatures should be handled as little as possible.

Messrs. Down Bros. have lately made some new forceps for manipulation of silk at operations, which seem to have certain advantages over the varieties of smooth Spencer Wells' forceps at present used for this purpose.

In shape they resemble dressing forceps with the blades bent at an angle of about 140° on the handles. The blades taper towards their extremities, the edges are rounded off and there are no serrations, so that there is no possibility of silk getting frayed or cut through.

The handles are not fitted with clips, but the grip of the forceps is quite firm.

The advantages claimed for these over the smooth Spencer Wells' are that the long tapering blades, bent at an angle, are much more convenient for delicate manipulations, such as threading needles, and especially for tying knots. The absence of the handle clips, too, is a decided advantage, as even fine silk is firmly held without them, and as the grip has very frequently to be changed, it is a disadvantage to have to clip the forceps each time for a firm grip.

There is no doubt that with a pair of these forceps needles may be threaded and sutures often be tied without any fingers at all touching the silk, and the risk of contamination from fingers considerably diminished.

P. T.

Fever Convalescence.

EVEN the most casual observer of hospital out-patient procedure cannot fail to observe the very large part which the Metropolitan Asylums Board plays in the lives of the London sick poor. The man who has "done fevers" gets a still further insight into the actual work of the Board, and if he has a sou' above a brute, as is usually the case, must be struck with the orderliness and comfort of the various fever hospitals. So the mental picture formed of this municipal authority is that of a being which controls swift well-horsed and restful ambulances, converging on a series of well-built, well-lighted, and well-officered hospitals. Probably few, however, realise the very complete arrangements by which the ultimate restoration to health of the fever patient is attained. Tucked away on the top of a wooded hill, sheltered from angry blasts by the well-set trees, yet enjoying the ripe sunshine and the pure air of Kent, lies the Gore Farm Hospital, at present used a convalescent depôt for scarlet fever patients. Built only a few years ago, the original idea was that of a small-pox station, to serve as a tender to the Hospital Ships and as a convenient place for the isolation of convalescent yet dangerous sufferers. But the small-pox came not, and the advantages of situation were too obvious to allow of further expectation. Consequently the admission of scarlatina cases, in a convalescent stage, was permitted some years ago and has continued up to a fortnight since.

The hospital proper consists of twenty "blocks" arranged *en échelon*, to admit of the maximum quantity of sunlight. Each block contains three "upstairs" wards, for patients who are under no medical treatment, and one "downstairs" ward for the hundred and one minor ailments of a large community. Amongst these, by the way, although hardly minor, must be reckoned the post-scarlatinal diphtheria, which is of considerable interest and importance. A hall, kitchen and dining-room, with one or two small rooms for isolation purposes, complete the contents of the block.

The usual executive buildings, wardmaids' and nurses' homes, laundry, laboratory, and chapel are of course present, but the chief point in which this place differs from the acute hospitals is in the possession of ample ground space. Huge natural gardens, with the trees and blackberry bushes untouched; woods, and even a football ground, are provided for the exclusive use of the patients.

Indeed, it is difficult to imagine the freedom from restraint under which the community lives. Given stringent powers, with ample means of enforcing them, it would be not unnatural if a somewhat peremptory and high-handed method were adopted in the fever hospitals. Obviously the ultimate end would be bad in the extreme, for the natural reluctance of the freeborn Briton to allow any interference with his liberty or his child's liberty, would be increased tenfold were the places of detention rendered distasteful. As it is, however, the fever hospitals, and Gore Farm Hospital in particular, are popular, and much of this depends on the tact and careful treatment extended by the executive. When the convalescent arrives in the two-horsed omnibus, he is received by an assistant medical officer into the ward to which he has been consigned. A cursory examination, chiefly ocular, suffices to prevent any sick patient from not receiving immediate treatment. The next day the medical officer of the block examines each new patient received, and if, as in the great majority of the cases, he be fit, orders him "clothes," and proceeds to settle his diet. Should he be an adult he is given the choice of beer or stout, and, male sex only, supplied with pipe and tobacco. The food is excellent and plentiful, complaints as to quality are unknown, and the appetites in a very short time do ample justice to the provisions. Sometimes a dainty stomach wants judicious coaxing, and then "extras," such as port-wine, fried sole, and bacon, appear on the diet sheet. Altogether, in the vast majority of the cases, the patients have never before in their lives experienced such a time of plenty. Of the pleasures and sorrows of visiting they are to a large extent deprived, for visits from parents are as a routine practice forbidden, although the ultimate decision lies with the medical officer whose patient is concerned. Not many applications for permission to visit are received, for the hospital lies some two and a half miles from Dartford, and even when the gates are reached, there is an additional three-quarters of a mile uphill before the administration blocks are reached. Sometimes, paternal enthusiasm will bring a father to the gate; but the additional three-quarters of a mile uphill generally knocks the stuffing out of his glorious resolve, and he contents himself with a few feeling messages through the insensate telephone. The great majority communicate by post. Each and every letter received is dated, the address verified, and sorted into its appropriate ward by the assistant medical officers. On the morning round, the child concerning whom enquiry is made, is dragged unwillingly from the garden and identified—not a difficult matter, as all the younger children are labelled! The medical officer then writes a holograph letter to the friends, telling them how the patient is progressing, and it is expressly laid down in the orders that the replies should avoid all appearance of being stereotyped. A personal tone is, as far as possible, introduced into each etter. When some thirty letters, relative to healthy children, whose sole sin is a superabundance of skin on the feet—literally a sole sin—have to be written in a morning, the English language begins to reveal a wonderful paucity of expression. Some of the letters from the parents are truly wonderful. Some are pathetic, and some insulting. That is as one expects. The unconsciously humorous, however, are in the great majority, and the handling of the truth is in many cases absolutely reckless. "I regret to inform you that Mary Ann has been detained on account of a discharge from her ear." "Dear sir, Mary Ann has always had a discharge from the ear." It seems the most favourite form of repartee,

but it never, never scores. When the time arrives, and the patient's skin no longer parts company with the patient, there is a grand examination by the Superintendent—*of feet, hands, noses, ears and throats.* If he is satisfied, the ward medical officer makes an examination of the patient's body the next day. On the third day the senior medical officer again examines the throats, ears and noses, and receives a last report on temperatures and urines from the nurse. If passed, the waiting 'bus rolls the emancipated sufferer up to his acute hospital, and into the arms of his friends.

One cannot help noticing the minute care which is expended in the protection of the patient and the public. The discharge examinations are most thorough and searching, and it is practically impossible for a dangerous person to be let loose on his helpless fellows. In the wards themselves, *the post-scarlatinal diphtherias, of which* there are generally a fair percentage, are at once removed from the non-infected patients, and as a matter of routine, cultures are made from every nasal or ear discharge, and from every sore throat that comes under notice.

The patients at Gore Farm have as good a time as it is possible to give them. They have not the liberty to roam at will amongst the public, but that is all. The weeping child is the child that is discharged and is going home, not the poor victim of a barbarous hospital system. Nothing, however, is perfect, and the people who have the most cause of complaint are the actual staff.

By its very nature the place is isolated; and by the *same token everything that can be done to reasonably* dispel the ennui of the exiled officers should be done. Leaving alone the nursing side of the question, the first legitimate source of complaint would lie with the medical officers in regard to their quarters. Every man, at least every educated man, likes and has a right to the luxury of solitude; yet one common room alone is provided for the assistant medical officers. The medical superintendent has, of course, his own house, a curious concrete erection apparently designed by the anonymous architect who plans coast-guard stations. His quarters and his meals are quite apart, away down in the vale by the empty plague camp. The two medical officers, however, have *their rooms in the executive block, and are cramped in a* manner which must be in winter most galling. For recreation they have the use of an asphalte tennis court, in need of repair, and there the tale ends. What will happen in winter, three miles from anywhere, is too dreadful to imagine.

A perfectly reasonable, and indeed a really necessary adjunct to the buildings would be a billiard-room, and a covered court—racquet or fives—of some sort. The men have got to keep fit both mentally and physically, and some provision is necessary. The question of separate sitting-room accommodation is also a matter that wants an immediate remedy, and afterwards, when these improvements have been effected, the whole hospital should be electrically lit. But that is of considerably less importance. As it is at present, Gore Farm Hospital stands as a monument of infinite care in the securement of comfort for the patients, and of a most absurdly inadequate conception of the wants of a medical officer. A Visiting Committee from the Asylums Board comes down and *spends a few hours in the hospital; the Medical* Staff spend their lives there. That is the difference. Given only a moderate view of the necessities of civilised and educated life, and as a concomitant the provision of additional quarters and a billiard-room at least, and Gore Farm Hospital might stand as an example of what hospitals should be. As it is, it exemplifies the insufficiency to which medical officers' quarters may sink. But already the Committee has under consideration this question of accommodation, so that in the near future even this grievance may be removed. S.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

Rugby Football.

DEAR SIR,—With the approaching advent of another winter session, the footballer feels an awakened interest in life, and is reminded that the time has arrived to bestir himself.

May I, therefore, on behalf of the Rugby Club, extend a hearty welcome to all freshmen, and also suggest to them that an occasional dose of exercise will contribute not only to their physical fitness—a matter of such great importance—but also materially assist their brains in successfully grappling with the requirements of the laboratory and dissecting room.

Moreover the partaking of an intelligent and active *interest in the various Hospital Sports, in which Rugby* football holds so prominent a place, is a sure way of acquiring a circle of friends, who can add much to the pleasure and profit of their time at Guy's, and perhaps be of service to them in their succeeding professional careers.

As to our prospects, the cup is once more in our possession, and we must retain it.

Of the back division, all remain, including our brilliant three-quarter line, whose combination gained such conspicuous success last season.

What we shall most require will be some weight forward, and the ability to use it.

Unfortunately, we lose the assistance of Wall in the pack, and Thomas in the loose; but trust to be able to fill their places effectively.

In conclusion, may I emphasise the necessity of "training," which last year enabled us so easily to hold our own against all other hospitals. "A man half fit is worse than useless." It is hoped that it will be possible to arrange several preliminary trial games in the course of the next fortnight, at which freshmen in particular should endeavour to turn out for. Lists will be posted in due course in the smoking-room, on which all men desirous of playing should write their names as

early as possible; and if in want of further information, any of the Club officials or myself will be most happy to assist them.—I am, Sir, yours truly,

HORACE CUTLER.

Guy's Hospital, S.E.

Association Football.

DEAR SIR,—Can you find room for the usual letter, formally inviting all freshmen, who wish to play Soccer, to turn up to our trial games at Honor Oak, notices of which will be posted in the smoke-room and colonnade.

It is, perhaps, rather doubtful whether this sort of appeal is read by those for whom it is intended, but it is customary to write one; and it is meant to point out that, although joining a new club is rather a dull business, considering the time spent at a hospital, it will probably in the long run be the most pleasant to play for your hospital, and though it is no good asking for patriotism where it is not felt, we should like to risk the statement that the Association Football Club will be a going concern, deserving of patriotism, for many years to come.

"Full particulars" can be obtained from any member of the committee, of whom a list appears in another column.

This letter will be an answer, if answer is required, to the statement sometimes made by a man that he was not asked to play.—I remain, yours truly,

HUGH BARBER, Capt. G.H.A.F.C.

Appointments.

SIR,—The recent lists of house appointments and clinicals are not without their surprises, and one is set wondering whether the present method of selection is altogether satisfactory. As it now stands a man's chance of success is considerably influenced by the members that happen to be present at the meeting, Naturally, if the surgeon to whom he dressed or clerked is away, he will not stand so good a chance as a better supported man. Would it not be better to recognize the fact that our Staff are far too busy men to be sure of always getting to a meeting, and to allow them when prevented to record their vote by letter or proxy. By this means the choice would be more representative than it is at present, and therefore fairer to all men.

I need hardly add I have no *personal* feeling on the matter or I should have left it to another to write.—Yours sincerely, H.

Physiological Society.

DEAR SIR,—Will you kindly announce that the Annual General Meeting of the Guy's Hospital Physiological Society will be held in the Demonstrators' Room (Physiological Department), on Thursday, 3rd proximo, at 4 p.m., Dr. Pembrey presiding. I should like to point out that we shall be very pleased to see, not only members, but also any men who are, or who intend to be interested in Physiology during the coming session.—Yours, &c.,

H. F. BELL WALKER, Hon. Sec.

Treatment of Aneurism.

DEAR SIR,—Since the treatment of aneurism by subcutaneous injection of gelatine has been much discussed at Guy's lately, you may be interested to hear that the treatment has been most successful here, where it has been used for eleven months now. We have had no bad symptoms develope, and it has been an unqualified success. Large aortic aneurisms are quite frequent among these patients, all of whom are seamen. I think, also, that this is the first hospital for treatment of general diseases where the open-air treatment of phthisis has been and is still carried out in a routine manner; for the past eleven months there has been twelve beds specially set apart for this method of treatment. No cases are treated until the tubercle bacilli have first been found by microscopical examination of sputum; and the results have been very satisfactory.

There are generally, during the winter months, about twenty or more cases of phthisis in the hospital. The disease is very prevalent among ship's firemen, and they seldom apply for treatment until the disease is so far advanced as to prevent them going to sea.—Yours sincerely, OSWALD MARRIOTT,

Seamen's Hospital, Greenwich, S.E. House-physician.
September 24th, 1901.

Indian Medical Service.

INTERVIEW WITH SURGEON-GENERAL W. B. BEATSON.

Among the distinguished visitors who favoured us with their presence on the occasion of the last Prize Distribution, was a famous old Guy's man in the person of William Burns Beatson, retired Surgeon-General to the Indian Army, late Surgeon-General of the Lahore Division.

Surgeon-General Beatson took his Membership of the Royal College of Surgeons in 1846; his Fellowship in 1867; Doctor of Medicine, St. Andrew's, in 1852; and the Membership of the Royal College of Physicians in 1884; which will be generally agreed, considering the period covered, a first-class professional record.

But it is of his connection with the Indian Medical Service, and of that Service itself, that Surgeon-General Beatson is proud above all other things, and we were glad of the opportunity to elicit from him some remarks, which will be read with keenness by those contemplating service in our Eastern Empire.

Surgeon-General Beatson confessed as a preliminary that, although he had been annually invited to Guy's

Hospital garden parties, the present was the first he had attended for some years. There was reason in this, because for some time he had been an old man. "But," he continued, "I should like to take the opportunity of expressing in words all the gratitude I owe to Guy's Hospital, its Governors, its Professors, and last but not least, its Founder, and the reason for that gratitude is that from that 1st of October nearly sixty years ago when I entered as a student at Guy's, my future became assured, and whatever success in life I have since achieved is due to the start which this hospital gave me.

No sooner had I passed my final examinations than I was recommended by one of the Guy's Surgical Staff for the medical charge of an East India passenger ship. I made three voyages round the Cape—the last in medical charge of troops. On return from this last voyage, I went as Assistant to a very nice old gentleman, who was getting too old for work, but I failed to relieve him, because the patients—especially the ladies—said I looked too young.

I was then 27, and getting well nigh desperate, so I went back to Guy's, and was there told that Mr. Masterman, Chairman of the East India Company, and then Treasurer of the Hospital, had placed at the disposal of its Staff a medical appointment in the Company's army, and I was advised to apply for it. So Guy's gave me the advice I pass on to my fellow students to-day.

I was fortunate enough to be selected for the appointment, and very soon afterwards found myself sailing again round the Cape of Good Hope as Assistant Surgeon in medical charge of troops.

Well, I served in India, chiefly in civil stations, for twenty-five years, in the enjoyment of excellent health, and obtained promotion to the Administrative Grade. Five years of the latter sent me home, too old for further service, with a pension double what I had expected when I first joined. Feeling then that I had done my work, and that I could give up the struggle for life which so many of us have to carry on to the last, I began to enter into my rest, and hence I have been seen so seldom since at Guy's.

I am sure you will forgive me for talking so much about myself, for only by so doing can I reach the moral I wish to point.

Some students have to-day received prizes, some (no doubt just as good men), have got none. There is one prize, however, open to all; that prize is entrance to the Indian Medical Service. I recommend that service because it has done so much for me. To those who at home find openings difficult to secure, I say go, as I did, to India. Go to the grandest region that you have ever lived in; go to a climate in some respects better than your own; live among tribes and people more interesting than any you have hitherto seen. Enter a school of tropical medicine, better even than Guy's. Enter the best paid and best pensioned medical service in the world."

We thanked Surgeon-General Beatson heartily, and promised to make his valuable recommendations known; a promise we now fulfil.

Guy's Hospital Clubs' Union.

THE FORMATION OF THE CLUBS' UNION, by the amalgamation of the various constituent institutions, took place in the summer of 1891. The objects of the amalgamation are to further the interests of the clubs and societies existing at the hospital by their mutual support, and to simplify the collection of subscriptions. By the payment of an annual subscription, or of a composition fee (see Clubs' Union Blue Book, page 17), to the Clubs' Union, any student of the hospital can obtain the privilege of membership of the constituent institutions.

THE GROUND OF THE CLUBS' UNION, which is under the control of the council, is situated close to Honor Oak Park Station, on the London, Brighton and South Coast Railway, and to the Crofton Park Station on the South Eastern and Chatham Railway. It is nine acres in extent, and is the headquarters of the Guy's Football, Cricket, Athletic and Lawn Tennis Clubs. Under such restrictions as are found necessary by the committees of the several clubs, and are approved by the council of the Clubs' Union, every member of the Union has opportunities of practising and taking part in matches, and in the various sports and games. There is a large pavilion upon the ground, with dressing and lavatory accommodation. Refreshments can be obtained by members of the Union according to the tariff of the Students' Club.

The ground-man, who is a professional cricketer, has quarters in the pavilion. His duties are to keep the ground in order, to prepare the wickets and lawn tennis courts, and to bowl to such members of the Union as shall be selected by the committee of the Cricket Club. Lockers may be rented on application to the ground-man, at a charge of 5s. for the summer or 2/6 for the winter season, 2s. 6d. deposit is also required on the key.

Cheap railway tickets between London Bridge and Honor Oak Park stations are issued to members of the Union upon conditions which will be found enumerated in the Clubs' Union Blue Book.

THE HOSPITAL "BLUE."—The "Blues" Committee, consisting of two representatives from each associated club, award "Blues" and "Half-Blues" to members of the following teams:—Rugby Football, Association Football, Cricket, Athletic, Lawn Tennis, Water Polo, and Bicycle, after considering the list of men suggested by the various Clubs' Committees through their delegates. Blues are awarded half-yearly, at the end of each session, so that the Rugby Football team be represented by fifteen Blues, the Association Football by eleven Blues, Cricket by eleven Blues. The Athletic by Blues and Half-Blues, dependent on the recommendation of the Athletic Committee, according to the performances at the Inter-Hospital sports. The Lawn Tennis by three Blues and three Half-Blues, the Water Polo by seven Half-Blues, and the Bicycles by six Half-Blues.

CONSTITUENT INSTITUTIONS.

The Football Clubs.—President, W. H. A. Jacobson, M.Ch. Rugby—Captain, H. A. Cutler; Hon. Sec., R. C. Lawry; Captain Second XV., H. S. Brown; Captain Third XV., H. D. Smart; Captain Fourth XV., T. Norman; and a committee of five, one representing each year. Association — Captain, H. Barber; Hon. Sec., E. L. Norton; Captain Second XI., P. A. Peall; Captain Third XI., H. A. Watney; and a committee of five, one representing each year.

The Rugby Football Club has now been in existence for over fifty years, the season 1901–02 being the fifty-eighth. Very little is known about its early history. It is, however, recorded that when the Rugby Union was formed in 1871, the G. H. F. C. was one of the original pioneers, and the only hospital club in the movement; it then had a reputation second to none. The club's position in the football world was acknowledged by the Union electing J. H. Ewart to serve on its first committee, which included such historic names as A. Rutter (president), E. H. Ash (hon. secretary), F. J. Currey, F. Stokes, and A. G. Guillemard. Amongst the many brilliant players who at one time or another have appeared for Guy's may be mentioned the following International footballers:—A. W. Pearson, W. W. Pinching, A. H. Jackson, L. Stokes (captain 1877–8), A. S. Taylor, W. G. Mitchell, A. Allport, H. W. Dudgeon (England); H. M. Jordan (Wales); R. Evans (Scotland); and F. O. Stoker (Ireland).

In 1874 the Inter-Hospital Challenge Cup was instituted, which Guy's was fortunate enough to secure for the first time. Since its institution, St. Thomas's has held the Cup ten times; Guy's seven times; St. George's three times; London and St. Bartholomew's twice each; and Middlesex and St. Mary's once each.

In 1891, Guy's, Middlesex and St. Thomas's were left in, the ties not being played out.

Last year, after most brilliant displays in the Inter-Hospital matches, we brought back the Cup to Guy's again; and from the present aspect of affairs there is no reason why we should not retain our prestige in this coming season, if only men will evince the same keenness which they showed during the past year. The plea of lack of time cannot possibly be entertained, for continuous and good training need cost little more than half an hour a day. The ground is always open, and footballs can always be obtained from Harris, the ground-man. The Gymnasium, too, must not be forgotten as a useful adjunct to getting fit. We have four fixture lists arranged this season, and we propose to hold trial games at the beginning of the season, the first being fixed for October 3rd. The form shown at these games will be considered by the committee in choosing representatives in future matches, so it is particularly desirable that all freshmen should make a point of turning out.

For the benefit of freshmen in particular, we may state that lists will be put up in the smoking-room and elsewhere, on which intending players should place their names as early as possible.

The officers of the club will be at all times very glad to give any information in their power.

The following matches have been arranged for this season:—

First Fifteen.

Oct.	2	Trial game	Home
	5	Kensington	Away
	12	Lennox	Home
	16	Cambridge	Away
	19	Catford	Home
	26	Racing Club de France	Paris
Nov.	2	Rosslyn Park	Away
	9	Croydon	Home
	13	Royal Naval College	Away
	16	Bedford	Away
	23	Old Merchant Taylors	Away
	30	*Blackheath	Away
Dec.	7	Northampton	Away
	11	Royal Engineers	Away
	14	London Scottish	Away
1902			
Jan.	4	Old Leysians	Home
	11	Catford	Away
	15	Royal Naval College	Home
	18	Rosslyn Park	Home
	25	Portsmouth	Away
Feb.	1	R.I.E.C.	Away
	8	Kensington	Home
	15	Lennox	Away
	22	Croydon	Away
Mar.	1	Marlborough Nomads	Home
	8	Harlequins	Away
	15	London Irish	Away
	22	Richmond	Away

*Combined with St. Thomas's Hospital.

Second Fifteen.

Oct.	5	Kensington	Home
	12	Lennox	Away
	19	Old Charltonians	Away
	23	St. Thomas's	Home
	26	Shaldon	Home
Nov.	2	Boro' Road College	Away
	6	St. Bartholomew's Hospital	Away
	9	Beckenham	Away
	16	Westminster Hospital	Home
	23	Old Merchant Taylors	Home
	30	St. Mary's Hospital	Home
Dec.	7	Croydon	Home
	14	Rosslyn Park	Away
1902			
Jan.	11	Rosslyn Park	Home
	15	St. Thomas's Hospital	Away
	18		
	25	Beckenham	Home
	29	St. Bartholomew's Hospital	Home
Feb.	1	Polytechnic	Away
	5	R.I.E.C.	Away

Feb.	8	Kensington	Away
	15	Lennox	Home
	22		
	26	St. Mary's Hospital	Away
Mar.	1	Marlborough Nomads...	Away
	8	Merchant Taylors School	Away
	15	Croydon	Away
	22	Hammersmith	Away

THIRD FIFTEEN.

Oct.	5	King's College Engineers A	Away
	12	Catford Bridge II.	Away
	16	Merchant Taylors School II. ...	Home
	19	Old Alleynians III.	Away
	26	Kensington III. (4 p.m.)	Away
	30	Royal School of Mines II.	Away
Nov.	2	Catford Bridge	Home
	6	Tonbridge School II.	Away
	9	Wasp III.	Away
	13	Royal School of Mines II.	Home
	23	Polytechnic A	Away
	27	Dulwich College II.	Away
	30	Wasps III.	Away
Dec.	4	Blackheath School	Away
	7	Old Charltonians A	Away
	14	Kensington III.	Home
1902			
Jan.	18	University College, Old Boys A ...	Away
Feb.	5	Dulwich College II.	Away
	8	Old Charltonians A	Away
	12	Merchant Taylors School II. ...	Away
	15	Old Alleynians III.	Away
	19	Blackheath School	Away
	22	King's College Engineers A	Home
Mar.	8	Polytechnic A	Away
	22	University College, Old Boys A ...	Away

The Association Club was instituted in 1882, and since that time has, for the most part, been a flourishing concern. For the first four years after the institution of the Inter-Hospital Challenge Cup (1886-89) Guy's held that trophy, and in two of these years won the Surrey Cup as well. We held the Inter-Hospital Cup again in 1894 and 1897, making in all six times. We believe no other hospital has won it so often.

Though we were defeated in the final tie of the Hospital Cup and by the winners in the Surrey Cup, last season was a most successful one, and we hope to have eight or nine of our team here this season. Our second team turns out regularly and has always been in the running for the Hospitals' Junior Cup which we held in 1899.

There are trial games for freshmen and others on October 5th and 9th, at Honor Oak Park, and notices will be duly posted; but should any freshman omit to put his name down, or be dismayed by the number of names already there, let him take this, if he reads it, as an official invitation to turn up to any trial game and a place will be found for him.

The following are next season's fixtures:—

FIRST ELEVEN.

Oct.	5	Trial game	Home
	9	Trial game	Home
	12	Old Harrovians	Home
	16	R.M.A.	Away
	19	Idlers	Home
	26	Croydon Park	Home
Nov.	2	Weybridge	Away
	9	Townley Park	Away
	16	Ipswich	Away
	20	Hastings	Away
	23	Reigate Priory	Away
	30	Beckenham	Away
Dec.	4	Old Carthusians	Home
	7	Old Foresters	Home
	14	Cheshunt	Away
1902			
Jan.	4	Old Eastbournians	Home
	11	Townley Park	Home
	18	Beckenham	Home
	22	Eastbourne	Away
	25	Weybridge	Away
	29	Casuals	Home
Feb.	1	Ewell	Away
	8	Cheshunt	Home
	19	Emeriti	Home
	22	Reigate	Away
Mar.	1	Idlers	Home
	5	Richmond	Away
	8	Ramsgate	Away
	15	Tunbridge Wells	Away

SECOND ELEVEN.

Oct.	12	Central Technical College	Away
	19	Old Foresters 2nd XI...	Away
	26	Hampstead 2nd XI.	Away
	30	Royal College of Science 2nd XI. ...	Away
Nov.	2	Kenley (reserves)	Home
	6	R.M.A. 2nd XI.	Away
	9	Cheshunt 2nd XI.	Home
	16	Townley Park 2nd XI...	Away
	23	Balham Wanderers	Home
	27	Sevenoaks	Away
	30	Beckenham 2nd XI.	Home
Dec.	7	Reigate Priory 2nd XI.	Away
	14	Townley Park 2nd XI...	Home
	21	Croydon Park 2nd XI...	Home
Jan.	4	Woodford Albion	Away
	8	St. Thomas's Hospital 2nd XI. ...	Home
	11	Kenley (reserves)	Away
	15	Royal College of Science 2nd XI. ...	Home
	18	Beckenham 2nd XI.	Away
	25	Hampstead 2nd XI.	Home
Feb.	1	Central Technical College	Home
	5	St. Thomas's Hospital 2nd XI. ...	Away
	8	Cheshunt 2nd XI.	Away
	15	City of London School	Away
	22	Dulwich 2nd XI.	Home

Mar. 1	Leavesden Asylum	Away
8	Surbiton Hill 2nd XI....	Away
15	Ewell 2nd XI.	Away
22	City of London School	Away

THE CRICKET CLUB.—President: W. A. Brailey, Esq., M.D. Captain: H. Barber. Vice-Captain: M. C. Wetherell. Hon. Secretary: H. M. Langdale. Captain second XI.: H. T. Palmer, and a committee of five.

Guy's have the best cricket ground of any London hospital and generally turn out a good cricket team.

Since the institution of the Hospital Cup in 1882, we have won it on twelve occasions, and at the present moment the cup is honouring our smoke room, where we hope it may remain.

To the list of succeses achieved in Cup-ties which is usually published in this paragraph, we add four "centuries," and two good bowling performances from last season's competition.

Three-figure innings in Cup-ties: J. C. Shenton, W. J. Scott, F. Colclough, J. H. Joyce, W. I. Hancock, C. J. Francis, F. C. Wetherell, H. M. Langdale, G. S. Graham-Smith, M. C. Wetherell, H. Barber.

In bowling, C. H. Rygate and J. D. Cruikshank took all the King's wickets in 1886 for *three* runs; J. H. Bettington seven for 21 against Bart.'s in 1890, and W. G. Mitchell the same against St. Mary's in 1887; J. H. Joyce in 1893, took twelve for 36 against King's, and eight for 19 against Westminster; F. C. Wetherell took five of University's wickets for 15 in 1897. In 1901, C. M. L. Cowper and M. C. Wetherell shared the wickets in dismissing Wesminster for 18 runs, and R. C. Poyser took seven Bart.'s wickets for 18 in the second innings of the final tie.

In conclusion, we should like to add that our prospects for the immediate future are fairly hopeful, and that *though the Cup-ties lend themselves better to records*, we do not wish to give them undue prominence, as perhaps many of our ordinary time-honoured fixtures are the more enjoyable matches.

THE ATHLETIC CLUB.—President: R. Clement Lucas, Esq., B.S., F.R.C.S. Hon. Secretaries and Treasurers: E. M. Harrison and R. S. Roper; and a committee of eleven. The annual meeting of the Athletic Club is held in June at the Clubs' Union Ground, Honor Oak Park. From amongst the successful competitors, the team to do battle for Guy's at the United Hospitals meeting is selected. Since the institution, in 1867, of the Athletic Championship of the United Hospitals—the first inter-hospital competition of any kind—Guy's, who were the first to secure the shield, have won it on eight occasions, St. Bartholomew's eleven times, St. Thomas's five times, St. Mary's four times, King's and St. George's three times each, and London once. Among the prominent athletes who have performed for Guy's are:—W. Malby, who appeared for North v. South in the two miles during 1873; A. W. Pearson, J. Reader, J. G. Gravely (1877), hurdles, who held the record for some years; L. Stokes, A. S. Taylor, W. G. Mitchell, H. A. Munro, who for five years (1891–95) won the mile and three miles, in each of which he holds hospital record, and in 1895 he won the amateur championship for four miles; H. T. S. Bell, who has three times (1892–94) won the 100 yards, twice (1892–3) each the 220 yards and high jump and long jump (1893–4); in his last year he also tied for first place in the "high"; P. R. Lowe, hurdles (1892–93); F. S. Batchelor, 440 yards (1893); E. N. Scott, throwing the hammer (1893–94–95), and F. W. Sime, 100 yards (1898), and 220 yards (1898–99).

THE LAWN TENNIS CLUB.—President: W. Arbuthnot Lane, M.S., F.R.C.S. Vice-President: J. W. Washbourn, M.D. Captain: E. N. Jupp. Hon. Secretary and Treasurer: B. A. Wedd; and a committee of eight. The club has been in existence some nine years. There are sixteen very good grass courts at Honor Oak, which are open for play from the end of April to the end of September. The club holds, at the beginning of the season, several trial games, which serve to bring before the notice of the committee all promising new players, while one or two matches are played weekly against various London clubs. The Inter-Hospital Challenge Cup was instituted in Jubilee year; it was held by St. George's until 1890; Guy's held it in 1891–1892; St. Thomas's, 1893–1896; St. Bartholomew's, 1897; London, 1898; St. Bartholomew's, 1899 and 1900; and this year it was won by St. Thomas's. A cup was also presented in 1899, by Dr. Washbourn, for a competition for second teams, which has been won this year by St. Thomas's.

THE RIFLE ASSOCIATION.—President: L. A. Dunn, M.S., F.R.C.S. Vice-President: G. Newton Pitt, M.D. Captain: A. Pearson. Hon. Secretary and Treasurer: G. C. F. Robinson; and a committee of five.

The Association arranges matches with the sister hospitals of London and with public school cadet corps, and also enters a team to compete for the United Hospitals Challenge Cup (held by Guy's in 1898) at Bisley during the "week." In the former series both Civilians and Volunteers are eligible to represent the hospital, but in the latter the regulations of the N.R.A. preclude any save Volunteers from competing. For this reason all new men who wish either to continue or to commence rifle shooting are requested to communicate immediately with the hon. sec. of the Association, who will give them information with regard to suitable volunteer corps.

The Annual Prize Meeting and Newton Pitt Challenge Cup Competition will be held early in October. The exact date will be posted on the notice-board in the Colonnade.

THE BICYCLE CLUB.—President: C. H. Golding-Bird, F.R.C.S. Captain: A. H. Forbes. Vice-Captain: S. J. Saunders. Hon. Secretary and Treasurer: F. C. Knight; and a committee of six.

The Club meets for runs every Saturday, except when engaged in race meetings, of which there are four every year, in addition to hospital contests.

A general meeting for the election of officers, etc., will take place in November, and all students who are cyclists are requested to communicate with the Hon. Secretary, or any member of the committee, and thus obtain full particulars.

The object of the club is to promote social runs among the members. In addition to several valuable prizes for competition, the President has given a very valuable cup to be raced for annually by members, the winner holding the championship for the season. The Captain is the present champion. It is hoped that all speed men will make themselves known, so as to be of service during the coming season.

The hospital has been represented in the United Hospitals, Cambridge, Oxford, London B.C., and Sheen House matches, and this year has won the Challenge Shield for the sixth time in succession.

GUY'S HOSPITAL SWIMMING CLUB.—WATER POLO.—President. A. D. Fripp, Esq., M.S. Vice-Presidents: L. A. Dunn, Esq., M.S., J. Fawcett, Esq., M.D. Captain: H. Bacon. Vice-Captain: A. L. Moon. Hon. Sec. and Treasurer: R. B. Dawson. Committee: L. V. Ransford, J. Cameron, C. H. Reinhold, R. Franklin, H. M. Grose.

The season of 1901 has not been so successful as it at one time promised to be; this was principally due to the great number of matches that had to be scratched. In the Surrey County Junior Competition we lost the one match we played (v. Brunswick S.C.) by 4 goals to 3, and in the Inter-Hospital Cup matches we were badly beaten by Barts.'s (4–0) after defeating St. Mary's by 3 goals to 2. More interest should be taken in the Surrey Junior Competition, as it is excellent training for hospital cup matches. We must look forward to a more successful season next year as we shall have most of the team with us still. We also want fast swimmers for the racing team, and we hope men will come forward and not wait to be ferreted out.

Our thanks are due to Mr. Baker, the courteous superintendent of the baths.

THE PUPILS' PHYSICAL SOCIETY.—Hon. President: Sir Samuel Wilks, Bart., M.D., LLD., F.R.S. Hon. Secretaries: G. Bellingham Smith, B.S., and A. P. Beddard, M.D.

This flourishing society was founded in 1830, on the plan of the old Physical Society, which existed during the latter part of the eighteenth century at Guy's Hospital. From a copy of the old laws of the Physical Society, dated 1800, we learn that the society met every Saturday night, from seven to ten, during the month of October, and each month until the following May. Business at these meetings was divided into private, including "matters in which the Society may be concerned," and public, consisting "in the communication of cases and opinions." A fine of sixpence was exacted from a member absent at the "Roll Calls," also from a member refusing to "hold up his hand on one side or the other," to decide any question. Members were divided into honorary, ordinary and corresponding. So much for the old Physical Society, of which an account is given in the *Biographical History of Guy's Hospital*, by Bettany and Wilks, a work which every Guy's man should possess. It may be obtained from the librarian, who has still some copies of the first edition, price 10s. 6d.

At the Pupils' Physical Society, which meets on Wednesday and Saturday evenings alternately each fortnight, a paper on some subject, not necessarily of medical interest, may be read by any member, to be followed by a discussion.

"Clinical and Pathological Evenings" are devoted to the exhibition and discussion of interesting cases or specimens which may be shown by any member.

On October 5th, 1901, there will be a general meeting of the Society. Sir Samuel Wilks, Bart., F.R.S., will be in the chair, and Dr. S. W. MacIlwaine will read a paper, "An attempted Definition and Classification of Diseases on the basis of Causation."

Members are reminded that in connection with the Society the following prizes are offered for competition:—The Treasurer's Prize of £5 is given annually, and the subject of the Essay for the ensuing session is "Traumatic fever." The Society offers a prize of £10 for the best paper read during the session; a prize of £5 to the member who distinguishes himself most in the discussions; and a prize of £5 to the member who exhibits the best specimens of scientific interest during the session (see Clubs' Union Blue Book, page 47.)

THE DENTAL SOCIETY.—President: E. B. Dowsett, M.R.C.S., L.R.C.P., L.D.S.. Vice-Presidents: F. W. Cock, M.D.; J. L. Payne, M.R.C.S., L.R.C.P., L.D.S.; R. P. Rowlands, F.R.C.S.; C. J. Hinchliff, L.D.S.; P. S. Campkin, L.D.S. Hon. Secretary and Treasurer: J. E. Spiller. Committee: W. E. Griffin, J. Cameron, P. Scott, H. J. Fox, A. E. Williams.

The Society was founded in the early part of 1894. Its seventh session commenced in October last, and was eminently successful in every way; good papers were read and much interest was taken in the meetings by the members.

Meetings are held every month during the winter session. They are held in the Dental Lecture-room on the second Friday in each month, at 4 p.m. Papers on subjects of dental interest are read, after which a discussion takes place; clinical cases are also shown at each meeting; and one evening during the session is specially set apart as a clinical evening. This year a prize of £5 will be given for the best paper read before the Society. The first meeting will take place on October 11th, at 4 o'clock p.m.

THE GUY'S HOSPITAL CHRISTIAN UNION (Hon. Secretaries: C. S. Morris, G. H. Steweni and C. Tessier) has

for its object the furtherance of the Christian life at Guy's Hospital. It is the perpetuation of the meetings instituted here by Drs. Habershon and Golding-Bird over forty years ago. On Thursdays, at 5 p.m., addresses are given by visitors invited for the occasion. These meetings are held in the board-room by the kind permission of the Treasurer. A room (No. 43) in the College is rented by the members for committee meetings, prayer meetings (daily at 1.10 p.m.), tea, and social intercourse. The Missionary Society, which is strictly undenominational, is doing good and useful work. The attempt thus made to unite the interest of the students in the work which is being carried on in foreign lands by medical missionaries, and to increase the knowledge of missionary work, has proved to many a source of helpfulness.

The opening meeting of the Union will take the form of a conversazione, to which all members and freshmen are invited, and will be held at 5 p.m., on Thursday, October 10th, in the board-room. On October 17th the annual sermon will be preached in the chapel of the hospital at 4.30 p.m. On each preceding occasion there has been a large attendance, and it is hoped this year will see a large congregation.

The list of meetings for the ensuing quarter will be published shortly. Copies may then be obtained in room No. 43 in the College, or from the Secretaries.

The Debating Society.—President: F. W. Pavy, M.D., LL.D., F.R.S. Vice-Presidents: J. Fawcett, M.D., W. C. C. Pakes and E. I. Spriggs. Hon. Secretaries: L. E. Stamm, E. H. Griffin; and a Committee of six students.

The Debating Society is entering on its tenth year of existence, and its eighth as a constituent of the Clubs' Union.

Five meetings are usually held in rotation with those of the Physical Society and the Smoking Concerts. Any subject except theology may be debated. Private business is allowed. A "Ladies' Night" is held at the end of the Session, at which members bring their friends, who are eligible to speak.

The secretaries, or any member of the committee, are always happy to receive suggestions or notices of motions to be brought forward at the meetings. Except at "impromptu" debates no one is called upon to speak. The society has been exceedingly flourishing during the last two years.

The Guy's Hospital Gazette is published on alternate Saturdays, from the library of the hospital, where copies may be obtained by all members of the Clubs' Union and by immediate subscribers.

Established in 1872, the Gazette was the first Journal of its kind ever published in this country. It ran an uninterrupted course until November, 1879, and was then suppressed by the hospital authorities rather from excess of zeal than from lack of material. The present "new series" was inaugurated in 1887, and since that time it has continued to flourish without a break. The original Gazette was a two-leaf publication, and only had a small circulation in the hospital itself. Its circulation now practically includes all Guy's men throughout the world, as well as the Nursing Staff past and present.

The management of the Gazette is vested in a committee, constituted as follows. Three members of the Hospital or School Staff, *appointed yearly* by a School Meeting. Two students, appointed yearly by the Clubs' Union Council. The President of the Residents for the time being. An Editor appointed by the Committee. A Manager appointed by the Committee, and other students not less than four in number and not more than six co-opted by the Committee.

The columns of the Gazette are open to contributions and correspondence from all sources, the writer's name being requisite as a guarantee of good faith, if not for publication. All contributions must be deposited in the editor's box in the colonnade, or addressed to the editor by post not later than Wednesday in each week of issue.

The Reports.—Edited by J. H. Bryant, M.D., and F. J. Steward, M.S.

The first volume of the Guy's Hospital Reports appeared in 1836. The Reports are published periodically, and contain contributions upon professional and scientific subjects from the staff of the Hospital and Medical School.

Members of the Clubs' Union are entitled to a free copy of the volume of the Reports that is published in the year in which they subscribe.

The Students' Club.—Committee till 1902 (March). President: P. H. Pye-Smith, M.D., F.R.S. Treasurer: W. Hale-White, M.D. Hon. Secretary: A. W. Ormond, F.R.C.S. Hon. Assistant Secretary: F. G. Cross, and a committee of eight.

The above-named manage the affairs of the Club, a full account of which will be found in the Clubs' Union Blue Book, p. 53.

Gymnasium.

The Pavy Gymnasium, which was built and furnished by the liberality of Dr. Pavy, is open daily for practice, and during the winter session the boxing instructor attends on Thursdays from 4 to 6 p.m., and the gymnastic and fencing instructor at the same time on Tuesdays. At the end of the session a competition for prizes is held, and a display of gymnastics and boxing and fencing is given on the "Ladies' Night."

From the Gazette's Special Pathologist.

NOTICES.

R.S.H., Ramsgate.—This tumour has the characteristic structure of a scirrhus carcinoma of the breast, and the surrounding fat is widely infiltrated.

PATHOLOGIST.

Reviews.

Syphilis and other Venereal Diseases. By De Mérie Published by Baillière, Tindall & Cox. 5s.

This book, which, in addition to syphilis, deals with the treatment of simple sores, gonorrhœa and its complications, is chiefly based on the author's observations on venereal disease at the French Hospital in London. As a result the book is essentially practical, and is written with a freshness of ideas that tends to set the reader wondering whether the methods of treatment he has been accustomed to accept as traditional are really the best.

On the vexed question of the respective merits of general and local treatment of gonorrhœa, the author sides with local remedies almost to the exclusion of drugs by the mouth. He is further of opinion that "the tendency always to give purgatives and antiphlogistics is rather exaggerated. This, whilst most useful in the case of a strong, healthy, full-blooded man, seems contra-indicated in a feeble, anæmic individual, to whom a basin of good soup would be of more use than a black draught."

The author generally treats cases, even at the very height of the disease, by the introduction of Cheyne's soluble iodoform and eucalyptus bougie, followed in a few hours by an injection of—

℞ Zinc Sulph.	...	gr. viii.
Tinct. Lavendulæ Co.	...	ʒss.
Aq. Rosæ	...	ʒiv.
Aq. dist.	ad.	ʒviii.

and repeats the same process on the following day. He never uses nitrate of silver in gonorrhœa; he regards it as too powerful a caustic to use on such a delicate mucous membrane as that of the urethra. He, however, admits that a weak solution is sometimes useful in old gleet.

Internal drugs the author would limit to cases in which local treatment is contra-indicated by the presence of stricture or epididymitis. Capaiva he believes to be more useful in cases of gleet rather than acute gonorrhœa.

There is a very interesting chapter on that rare manifestation of syphilis, gumma of penis, and its diagnosis from phagedænic primary syphilitic chancre and the "soft sore" is fully discussed.

In the last two chapters "The Prophylaxis of Syphilis" and "The Contagious Disease Act." The public health side of the subject is treated from a scientific and medical point of view. M. de Mérie is justly severe on all "anti" individuals who "flourishes in a magnificent medium of hysterical pabulum constantly fed on the nervous irritability engendered by the pace which has to be kept up if the race for existence."

We heartily commend this book to all who are not content merely to have read the ordinary account on venereal disease given in the usual text-books, as one full of suggestions given in a concise crisp style.

Nursing News.

MATRON'S OFFICE.

On September 18th, Nurse Bible, head nurse in Luke ward, left the hospital to take up her duties at the Guy's Trained Nurses' Institution, and Probationer Cameron was appointed to succeed her as head nurse.

On September 20th, Nurse Adams, head nurse in Charity ward left the hospital to take up her duties at the Guy's Trained Nurses' Institution, and Probationer Layton was appointed to succeed her as head nurse.

On September 25th, Nurse G. Reeve, late head nurse in Victoria ward left the hospital, after over five years' service, to take up an appointment under the Colonial Nursing Association at Malay, and will sail for Singapore about the middle of next month.

Papers by Guy's Men.

A new Centrifuge for Bacteriological Work. Illustrated. Also,

Further Observations on the Standardisation of Nutrient Media. By J. W. H. Eyre, M.D., F.R.S. Edin.—*Ibid.*

Mechanical or Traumatic Arthritis. By W. Arbuthnot Lane, M.S.—*Ibid.*, 25th September.

Births.

HALL.—On September 8th, at Elstowe House, Itchen, Southampton, the wife of Edmund S. Hall, M.B. Lond., L.R.C.P. Lond., M.R.C.S., of a daughter.

HANCOCK.—On September 11th, at Court House, Wiveliscombe, Somerset, the wife of W. Ilbert Hancock, F.R.C.S., of a son.

HENSON.—On August 27th, at Maritzburg, Natal, the wife of W. Warner Henson, District Surgeon, Impendhle, of a daughter.

HINCHLIFF.—On September 14th, at "Westbourne," Selhurst Road, South Norwood, the wife of Charles J. Hinchliff, L.D.S. Eng., of a daughter.

Marriage.

MILTON—LANE.—On August 26th, at Christ Church, Greenwich, by the Rev. Hook Longsdon, Vicar of St. Michael's, Lant Street, Borough, William Tayler Milton, M.S., M.B. Lond., to Louise Frances Lane, daughter of the late Walter Lane, of Heavitree, Exeter.

Death.

PASSMORE.—On July 30th, at Upper Tulse Hill, S.W., Arthur Bradshaw Passmore, aged 43 years.

ED.—D. G. G.

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Calendar of Coming Events.

October, 1901.

Sat. 12.—Messrs. Jacobson and Fripp's take-in; Drs., W. E. J. Tuohy and W. L. M. Day; Cl., A. C. H. Gray.
1 p.m., Clinical lecture by Dr. Pitt.
G.H.R.F.C., I., Lennox, home.
II., Lennox, away.
III., Catford Bridge II., away.
G.H.A.F.C., I., Old Harrovians, home.
II., Central Technical College, away.

Mon. 14.—1.15 p.m., Clinical lecture by Mr. Lucas.

Tues. 15.—Final Conjoint Exam. begins.

Wed. 16.—1.30 p.m., Clinical lecture by Dr. Galabin.
G.H.R.F.C., I., Cambridge Univ., away.
III., Merchant Taylors School II., home,
G.H.A.F.C., I., R.M.A., away.

Thur. 17.—Messrs. Howse and Symond's take-in; Drs., A. P. Piggot and C. H. Denyer; Cl., E. I. Claxton.
G.H.C.U., Address by Dr. Robert McKilliam.

Sat. 19.—1 p.m., Clinical lecture by Dr. Pitt.
G.H.P.P.S., Clinical Meeting.
G.H.R.F.C., I., Catford, home.
II,, Old Charltonians, away.
III., Old Alleynians, away.
G.H.A.F.C. I., Idlers, home.
II., Old Foresters 2nd XI., away.

Mon. 21.—1.15 p.m., Clinical lecture by Mr. Lucas.

Wed. 23.—1.30 p.m., Clinical lecture by Mr. Higgens.
G.H.R.F.C. II., St. Thomas' II., home.

Thur. 24.—Messrs. Lucas and Lane's take-in; Drs., E. Faulks and H. T. Palmer; Cl., A. C. Ransford.
G.H.C.U., Annual Sermon, at 4.30 p.m., in the Chapel, by Rev. J. C. Elliott, M.A.

Sat. 26.—1 p.m., Clinical lecture by Dr. Pitt.
Last day for applying to Registrar for Form of Entry for M.D. and M.S., Lond.
Sat. 26.—G.H.R.F.C. I., Racing Club de France, Paris
II., Shaldon, home.
III., Kensington III., away.
G.H.A.F.C. I., Croydon Park, home.
II., Hampstead 2nd XI., away.

Guy's Hospital Gazette.

OCTOBER 12, 1901.

Rectal Feeding.

By Dr. A. P. Beddard.

Feeding by the rectum is a necessary evil in the treatment of some medical and surgical cases. It is an evil for two principal reasons, (1) serious damage may be done to the walls of the rectum by rectal injections improperly given. It is possible to forget that the last part of the rectum passes from the anus forwards as well as upwards, and that it is not lined by stratified epithelium. Abrasions of the mucous membrane are therefore easily produced by a hard nozzle improperly directed, and these lead to irritability and intolerance and even to serious ulceration of the rectum. (2) It is a diet but little removed from starvation. The rectum is only able to absorb in a day food containing about 500 to 800 kilo-calories of energy, and this is not more than a quarter to a third of the energy that an adult lying at rest in bed requires.

A complete diet consists of water, salts and proteids, but part of the latter can be replaced by carbohydrates and fats. In choosing a diet suitable for rectal feeding, two points have to be considered, (*a*) the power of the rectum to absorb various foodstuffs, which is totally different from that of the small intestine, and (*b*) the relative nutritive values of such quantities of different foodstuffs as the rectum can absorb in a day.

To take the various foodstuffs in order—

1. Proteids. The following are readily absorbed:—(*a*) All *peptonised proteids*: the only objection to their prolonged use is that they may irritate the mucous membrane of the gut inducing a large flow of water into the alimentary canal and increased peristalsis; consequently they should not be given in solutions containing more than about 20 per cent. of

peptones and albumoses. Since the large intestine secretes no digestive ferments it might be thought that only peptonised proteids could be absorbed, but this is not the case. (*b*) *Raw meat juice* and (*c*) beaten-up *eggs* are just as well absorbed as if they had been peptonised. Like albumoses and peptones, egg albumen in moderate quantities can be altered during absorption into some other form of proteid, and consequently becomes assimilable. On the other hand, *gelatin* is not absorbed at all, and the proteids of *undigested milk* most imperfectly.

Of dry peptone powders some of the best are *Somatose* made from meat, readily soluble in water and containing 62 per cent. proteids, of which 37 per cent. are in the form of albumoses and peptones, and the rest in a readily assimilable form as alkali albumen. *Milk somatose* is an exactly similar product made from milk proteids; it contains 5 per cent. of tannic acid in combination, and this might be an advantage when the bowel is irritable. *Mosquera beef-meal* contains 77 per cent. proteids, of which 29 per cent. are albumoses and peptones, and 13 per cent. fat; but fats being but slowly absorbed by the rectum are of no particular advantage in this preparation.

Raw beef-juice made in the ordinary way by mincing ½lb. of lean beef, placing it over night in its own bulk of cold water, and squeezing it through muslin, consists of 4½ ozs. of fluid, containing 5½ per cent. proteids in it. Of artificial beef-juices the only one that contains a large percentage of true proteid is *Puro* with 29 per cent.

The edible part of an *egg* weighs about 1½oz. and contains 15 per cent. proteids and 10 per cent. fat; the yolk weighs ½oz., and contains 16 per cent. proteids, and 32 per cent. fat; the white has 13 per cent. proteids and but a trace of fat. The yolk only differing from the whole edible part of the egg in its far higher percentage of fat offers no advantage for rectal feeding.

2. Carbohydrates. *Cane sugar* is inadmissible because, although readily absorbed, it is so without alteration and is not assimilable.

Dextrose is assimilable and rapidly absorbed but has a high osmotic pressure. A 5·8 per cent. solution is isotonic with the blood but is too dilute to be of much value as a food unless given in enormous quantities. A 10 per cent. or 20 per cent. solution, being greatly hypertonic, will for a time attract large quantities of water into the bowel and the enema may soon be returned.

Starch, when boiled, is rather too thick to inject easily, but given raw is curiously enough well absorbed, and being colloid has no osmotic pressure; hence it can be given in large quantities at a time.

3. Fats, having more than twice the calorific value of carbohydrates or proteids, would be of great value in rectal feeding, if it were not that the mucous membrane absorbs them so slowly. The rectum under, the most favourable circumstances, cannot absorb more than about ½ oz. of fat in twenty-four hours, *i.e.*, about the quantity in 3 eggs, or in 3½ ozs. of Mosquera beef-meal; and in order to get even that quantity absorbed the bowel must be as far as possible clean and empty. Therefore after the daily cleansing enema, the next injection may with advantage contain 3 eggs or Mosquera beef-meal; in subsequent enemata only the whites of eggs should be used.

4. Alcohol is rapidly absorbed from the rectum, and either ½oz. brandy or 2½oz. red wine may be inserted into any enema, and will add about 50 kilo-calories of energy to it.

5. Salts and 6. Water are also rapidly absorbed from the rectum, and constitute the vehicle for the other kinds of food.

Since absorption of nutriment by the rectum is at best a slow and comparatively feeble process, it is necessary to discuss the various factors which aid absorption.

(*a*) The nature of the vehicle is probably one of the most important. In order that the feeble absorptive power of the cells lining the rectum shall be at its maximum, the fluid injected should, so far as possible, be isotonic with the blood. Any osmotic pressure that proteids have is negligible, and fats and starch have none, therefore only the salts have to be considered. A 1 per cent. solution of sodium chloride in tap water is isotonic with the blood, is one of the best general vehicles, and is practically essential for the proper absorbtion of fat and the proteids of raw eggs. A 5·8 per cent.

solution of dextrose in tap water is also isotonic with the blood, and may be used as a vehicle for peptones, beef-juice or starch; 9ozs. of it contain about 58 kilo-calories of energy. A very common vehicle is milk, either raw or peptonised; it has, however, these disadvantages, that it is not isotonic with human blood and that it is incompletely absorbed; for, of the milk with its 3 per cent. proteids, 3·5 per cent. fat, and 4·5 per cent. sugar, only a third of the proteid, some of the fat, and the whole of the sugar will be absorbed, and 9ozs. of it will add only about 31 kilo-calories of energy to the body. Peptonised milk is but little better, containing as it does not more than half its proteids as albumoses and peptones, and 9ozs. of it will give the body only about 91 kilo-calories of energy.

(*b*) The mucous membrane should be kept as far as possible clean. To ensure this the bowel should be washed out once a day with warm 1 per cent. salt solution, and the washings examined for unabsorbed food. Also, as far as possible, no unabsorbable food should be given. The small intestine has rhythmical movements which bring all its contents in turn into contact with the mucous membrane, but the rectum of man has little or nothing of such movements, consequently if unabsorbable food lies in contact with the mucous membrane it will delay or prevent the absorption of other food which is absorbable.

(*c*) The injections should be spread over as great a surface of mucous membrane as possible. With the patient lying flat in bed it would require considerable force to send the injection past the sigmoid flexure, and force must not be used for fear of setting up peristalsis. But by raising the hips on a pillow so that the anus is the highest point, fluid can be made to run by gravity a considerable distance along the colon.

(*d*) The injections should be given at the temperature of the body.

Constructing enemata on the principles laid down, we should get the following among the many possible combinations. Appended to each are its approximate elementary composition in grammes and its nutritive value in kilo-calories:—

Fat and Proteid Enemata.

(1) Mosquera beef-meal { Fat 13 = 117; Proteid 70 = 280 } 397 kilo-cals.
Salt, gr. 40.
Aq., ʒ 9.

(2) Eggs 3 { Fat 14 = 126; Proteid 18 = 72 } 198 kilo-cals.
Salt, gr. 40.
Aq., ʒ 9.

Peptone and Sugar Enema.

(3) Somatose, ʒ 3½. Proteid, 60 = 240.
Dextrose, 3·8 per cent. solution, ʒ 9. Carbohydrate ... 14·5 = 58.
298 kilo-cals.

Beef-juice and Egg Enema.

(4) White of 3 eggs / Puro, ʒ 1 ... } Proteid { 11 = 44; 14 = 56 } 25 100 kilo-cals.
Salt, gr. 40.
Aq., ʒ 9.

Egg and Milk Enema.

(5) Whites of 3 eggs. Proteid, 11 / Salt, gr. 40. } 16 = 64
Peptonised milk, ʒ 9 { Proteid .. 5 / Fat ... .. 3 = 27; Carbohydrate 11 = 44 }
135 kilo-cals.

Starch and Egg Enema.

(6) Pure starch. Carbohydrate, 57 = 228
Whites of 3 eggs. Proteid 11 = 44
Salt, gr. 40.
Aq., ʒ 9.
272 kilo-cals.

Arrowroot and Beef-juice Enema.

(7) Arrowroot, ʒ 2. Carbohydrate 47 = 190
Raw beef-juice, ʒ 9. Proteid ... 14 = 56
246 kilo-cals.

Sugar and Beef-juice Enema.

(8) Grape sugar, ʒ 1. Carbohydrate, 30 = 120
(=11 per cent.)
Raw beef-juice, ʒ 9. Proteid ... 14 = 56
176 kilo-cals.

The next point to consider is the device of the enemata to be given. The energy of the absorbed food should normally be about 40 kilo-calories per kilo of body weight per day. Since, however, it is not possible to get more than about 15 kilo-calories per kilo absorbed from the rectum, and since the quantity of fat absorbable is strictly limited, it only remains to decide the proportion of the non-nitrogenous carbohydrate to the proteid food to be given. This proportion is normally about 4·5 to 1, and if

this were carried out in rectal feeding it would reduce the proteid per kilo per day to about ·6 grammes as against the normal 2 grammes. There are, therefore, two alternatives open to us, either to give the non-nitrogenous and nitrogenous foods as nearly as possible in the usual proportion, although the quantity of proteid per kilo would be very small, or else to disregard this proportion and give relatively more proteid. The considerations that should guide us are, that since the total energy of the food is small, the balance will have to be provided by energy already stored in the patient's tissues ; that the consequent using up of the tissue proteids is the thing above all others to be as far as possible avoided ; that an adequate supply of proteid food is therefore essential; that the more wasted the patient is, and the less energy stored in his body as fat, the more proteid will have to be given in the food to keep down the waste of the nitrogenous tissues ; that even in a fat, well-nourished patient the quantity of proteid necessary to give per rectum is well over 1 gramme per kilo of body-weight, and in a wasted patient 2 or more grammes per kilo would be necessary. By using enemata (1), (7), (3) and (6) it is possible in twenty-four hours to give 155 grammes of proteid, 13 grains of fat and 118·5 grammes of carbohydrate with a total energy of 1213 kilo-calories.

The objection to this diet is the necessary cost of large quantities of proteid in concentrated form. By using simply milk, beef-tea and eggs it is impossible to give anything like the necessary quantity of proteids, and as nutrient enemata are, in most cases, a very temporary evil, the extra cost need not last long. Another objection to these prepared foods is their lack of antiscorbutic properties, and in order to neutralise this one enema a day should contain fresh raw meat juice.

For comparison, the enema in the appendix to the Guy's Hospital Pharmacopœia may be quoted. It consists of:—

Yolk of 1 egg	Proteid 2·5 Fat ... 4·5	Proteid 4·5 = 18 Fat ... 7·5 = 20
Salt, gr. 20		
Peptonised milk, ʒ 4	Proteids 2 Fat ... 3 Carbohydrate 5	Carbohydrate 5 = 67.5
		105·5 kilo-cals.

This enema is, therefore, a bad one, for the following reasons:—(*a*) Two-thirds of its total energy are due to fat, and yet two such enemata contain all the fat absorbable in a day. (*b*) The quantity of proteid contained is totally inadequate. Even six such enemata a day would not supply a man of 70 kilos with more than ·25 grammes proteid per kilo.

It may be pointed out here that even the best nutrient suppositories are practically useless ; they are often very imperfectly absorbed, and the total quantity of energy they contain is very nearly negligible.

The best point to consider is the size of each enema and the number to be given in twenty-four hours. Other things being equal, the less often a patient has to be disturbed in order to be fed the better. Therefore a few large enemata at longer intervals are better than smaller ones given more frequently. An adult will, as a rule, easily retain an enema of 9oz. if the following points are attended to : that the enema is at the temperature of the body, that it is run in slowly and continuously without squirting and without air, that it is spread over the largest possible surface of the large intestine, and that it is not allowed to trickle down in the rectum towards the internal sphincter, for the higher material is in the large intestine above the internal sphincter, the less likely it is to set up a reflex act of defæcation.

In order to attain these objects, the enema should be administered by a funnel connected to a soft rubber œsophageal tube, which should be filled with the fluid to be injected, clamped, and introduced as high up into the rectum as possible: by raising the funnel the fluid can be made to run in at any required rate, a height of about three feet being generally sufficient. The patient should be allowed to remain in the same position with the hips raised for some time after the enema has been given. If the enemata are not easily retained, they should be injected more slowly, and the patient, if possible, kept longer with his hips raised. If this fails, then the bulk of each enema may have to be reduced. If there is evidence that peptones or sugar are causing irritation of the bowel, as they certainly may, then they must be temporarily replaced

by other foods. Finally, some astringent, like red wine, may be added to the enema, or a sedative, like opium.

If enemata of 9 ozs. each can be used, not more than four and possibly only three can be given in twenty-four hours. They may, therefore, contain a totally inadequate quantity of fluid, especially if the patient be vomiting or loosing large quantities of water in other ways from the vasular system. It is certainly true to say that more patients die from want of water than of any other kind of food; therefore, in all cases of rectal feeding in which extra fluid cannot be taken by the mouth, it is necessary to inject sterilised salt solution under the skin at regular intervals. In an adult it is quite easy to inject half a pint of such fluid twice a day into each axilla without causing pain.

Nursing News.

Matron's Office.

On October 1st, Nurse Park left the hospital on completion of her three years' training.

On October 1st, Nurse H. Reeve, head nurse in Mary ward, left the hospital on completion of her three years' training to take up an appointment of Charge Nurse at the Park Fever Hospital, Hither Green. Probationer M. Rogers has been appointed to succeed her as head nurse in Mary ward.

The following Probationers were successful in passing the examination in nursing subjects held on Thursday, September 26th:—Probationers Archbold, Atkey, Anderton, Broome, Browning, Bell, Bisson, M. Brown, Cornwell, K. Casey, P. Casey, Coward, A. Clarke, E. Clarke, Cantwell, Cheesman, E. Densham, Du Boulay, England, Edmunds, Foster, Fox, Gilbert, Grigor, Gore, Gyles, Haslar, A. Hayward, Heritage, Hawes, Harden, King, Lokier, Leonie, Morley, Macfarlane, P. Manning, V. Manning, Mackenzie, Millard, Melia, Medley, Nawn, Owen, Pearse, Pallett, Potter, Scott, Spreckley, G. Studdert, Stanton, Sheldon, Spink, Smith, Thomas, A. Topping, Thorpe, K. Thomson, Williams, Wilson, West, Wright.

Chapel News.

Sunday next, October 13th, is the Harvest Festival. Holy Communion at 7 a.m. and 8.45 a.m. Preachers: at 11 a.m., the Rev. A. G. Deedes, St. John-the-Divine, Kennington; at 7 p.m., the Rev. Carey Taylor, Vicar of Benhilton.

The Physical Society.

The opening night of the above society was held on Saturday last in the Physiological Buildings. As on many former occasions, Sir Samuel Wilks was in the chair, and opened proceedings with an introductory address, as follows.

The President said:

I have revolved once more round the centre of all life and have been spared to come again amongst you. I may heartily congratulate you on the prosperous state of Guy's School, of the work it has done and of the position which it takes in the van of scientific progress. More ostensibly it has prospered by the encouragement it has received from wealthy friends, and as regards the hospital generally it has placed itself prominently in the front during the war, both by the work of its doctors and nurses. It is pleasing to see that this has not been overlooked by Royalty, and that some of our staff now hold high appointments in the Court of the King. Quite as pleasing to me is the fact that we are equally well regarded by our compeers in the profession, and that one of my colleagues and one of your teachers has been chosen to preside at the head of the College of Surgeons. Knowing Mr. Howse's disposition, his modesty and his indifference to public fame, I trust that he will regard it as the highest honour which could be conferred upon him. There was a time when the election of President went by rotation, but now the Council have a free hand to choose the best man, and they have put their finger upon Mr. Howse as the one most worthy to fill the position. This was only echoing the sentiments which prevailed here. I myself hold a strong opinion that no better man could have been chosen for the post when I consider the amount of good surgical work which he has done, his excellence as a teacher, and above all his high personal character which is beyond all praise from me. He was one of the first who adopted the antiseptic treatment before it came into general use, and he carried this out in so thorough a manner that his success was quite remarkable. Amongst the most successful of his operations was one which I think will ever be associated with his name and with Guy's, I mean the resection of joints; this he elaborated in so skilful and perfect a manner that he placed the whole subject on a firm foundation. This is an operation in which all Guy's men have a personal interest, for I may remind you that the first important paper on the subject was read at this very Society by a student named Blackburn, and is to be found in the 1st Volume of the Guy's Hospital Reports for 1836. All that was written subsequently took this essay as its basis as you will see if you refer to Cooper's First Lines and Dictionary, works on Surgery which were published about that time. It is true that during the whole previous century, operations for removal of diseased bone from joints had been performed, but these had never been put on a firm foundation until Blackburn's time. It must be remembered that whatever the skill of the surgeon might have been it was impossible that he could

have performed operations of long duration before the time of anæsthetics. I always give the dentists the credit for having introduced conservative surgery into the profession when they cut out the decayed portion of a tooth, filled up the cavity, and so arrested the course of the caries. It is remarkable that there is not a discovery, however new, but that extraordinary man, Shakespeare, the myriad-minded, seems to have some acquaintance with it; as, for example, Newton's law of gravitation and Harvey's circulation of the blood. And so here again, when the Poet seeks for an illustration for the reform of the constitution, he says—

"This fester'd joint cut off; the rest rest sound
This let alone, will all the rest confound."

as if resection were known to him.

It has occurred to me that having for so many years, at the opening of the session dilated on the general interest of our profession, and uttered many platitudes, which I fear often fell on stony ground, that I would take up a little more of your time on the present occasion and speak of a subject which has always appeared to me one of the greatest importance, and which is quite appropriate, in relation to the one which we shall hear to-night by Mr. MacIlwaine, on the causes of diseases. My theme will be *the importance of having a history of the growth of our knowledge of different diseases.* This is not sufficiently considered, either by teachers or students of science. The former have been too apt to confine themselves to what is known at the time about any object or phenomenon, as if this knowledge was absolute, and was not intimately associated with our own methods of thought. We have simply began with a recognition, and this has gradually been enlarged as time has gone on. It is this history with which the student should be acquainted; he cannot know more than the human intellect can grasp, and his knowledge, therefore, is purely relative to himself. It is not absolute knowledge he is in possession of. This is why we form hypotheses which are suited to our own mental vision. For example, we explain the phenomena of light by the undulations of an ether, which is purely imaginary; or speak of an electron as an atom or molecule of electricity, which is purely a fiction of our own mind.

The student ought to know the different steps by which our knowledge has been obtained, and then he will better understand the more recent views and hypotheses. A lecturer may shew his class some oxygen gas and its striking qualities; but the student will know more about it if he is first acquainted with its history from the beginning, and be told that about the middle of the eighteenth century, two natural philosophers, named Priestley and Lavoisier, were struck with the fact that iron became rusty when exposed to the air, and that other metals were also affected under the influence of heat, as when mercury turns red. They took these new formed materials and got a gas from them under receivers, and found they contained a very important constituent of the atmosphere, and which one chemist called phlogiston, and the other, oxygen, or the acid producer. In this way a student gets his first insight into the subject All the complex phenomena of electricity as now taught can be better understood when the student is carried back to the story of rubbing the sealing-wax, and the early experiments of Volta and Galvani.

Now, similarly as regards disease, our acquaintance with any distinct form of malady begins with its first recognition or discovery, and we then see how from time to time it grows in fulness as fresh facts are added to it. I can imagine a student sitting down at the bedside of a case of typical typhoid, and in about half an hour completing a very good account of it. He might possibly think that any practised hand could have done the same at any time during the past centuries; but a moment's thought will tell him that this was impossible, for how could the accurate degree of temperature or character of the pulse be taken before the necessary instruments were invented? If he had been a student only five years ago, he would have known nothing of the bacterial blood test. When I was a student typhoid was mixed up with three other diseases. The fact is, that the apparently complete description which the student is able to write down in half an hour has taken centuries to obtain. Our knowledge of anything in nature is nothing more than our own mode of looking at it with the powers we possess. It is relative, and is increasing in value according to the continued additional light we can throw upon it. It has been said by poets and others that we learn from nature; but this is a great mistake—the arcana are too complex; they require investigating. This is what Harvey taught when he said, "Search out the secrets of nature." What did the fall of an apple teach the world until Newton came and spent twenty years in studying the laws of gravitation? Our knowledge must be gained step by step until we arrive at the explanation. It has been truly said that the structure of a nerve resembles the electric cable when we note its axis in the centre corresponding to the wire, the neurine like the gutta percha, and the fibrous tissue like the envelope; but no amount of gazing at the nerve could possibly have suggested the telegraph cord to a person ignorant of the properties of electricity. So it is said that the mechanism of a tubular bridge may be seen in the thigh bone or a straw, but the anatomist never taught that the amount of material composing the os femoris was stronger when made into a hollow shell than a solid stem until the engineer had spent two years in making experiments which terminated in the invention of the Britannia Bridge. Then he saw the principle in nature as exemplified in the straw which carries the ear of corn. The Greeks were wonderful observers, and portrayed what they saw in a manner which has never been equalled, but few of them investigated, and fewer still experimented, and, therefore, had very little knowledge of a scientific kind.

I have all my life been endeavouring to induce some man of learning to write the history of individual disease. It is true that this has been done in France and Germany, and contained in bulky volumes, but what we

want is a short history of each disease from its first recognition until the present time, in the encyclopædic form. Such a work would be incalculably useful. When the other day, I was challenged by one of our most distinguished physicians of the country to declare why I denied that leucoderma was a symptom of Addison's disease, when the author himself published a case with a drawing in his original treatise, he might have been saved the enquiry, and myself a long reply, had there existed a small dictionary in which the whole history of the disease from the beginning had been briefly told. It would therein have appeared that Addison did do that which was said, and gave the portrait of a man covered with white spots, but of whose future history he knew nothing. Now, it may be assumed that Addison's remarkable discovery brought an enormous amount of material to the hospital during the next two years, and that so striking an appearance as leucoderma could not have been overlooked, so that numerous cases of this affection, supposed to be instances of supra-renal disease, were sent in amongst them; but not a single case turned out to be a genuine example of supra-renal disease. In my report, extending over two years since Addison's treatise appeared, I stated this fact, and suggested that it was an error to have inserted such a doubtful case. I showed Addison my paper. He assented, and wished it published. Since this time no authentic case of leucoderma has been reported in connection with supra-renal disease. Now, if a short history of the gradual development of our knowledge of the disease had been available, all this controversy might have been avoided.

Quite lately, in connection with the beer and arsenic investigation, my name was mentioned as one of the original observers in alcoholic neuritis; my right of originality being both affirmed and denied. Now, a short history of the subject would have shown that I was the first who wrote on alcoholic paralysis, which I believed was a spinal affection, but the discovery that it was often a neuritis was left to others.

In the so-called appendicitis much trouble would have been saved, and I think practical good gained, had there been a history of the complaint from the time of its recognition. Many seem to think that this popular complaint has only been known since the surgeons commenced to operate upon it; but, as a matter of fact, it came into the course of lectures when I was a student, and a complete account of it may be found in Addison's lectures published in 1836. So complete is his description, that I have no hesitation in saying that not a single new fact has since been added to it. It was called typhlitis, or perityphlitis, the commonest cause of which was said to be a concretion in the appendix causing ulceration. It would have been far better for many surgeons' reputation had the original term been preserved, and so saved themselves the mistake of using the term appendicitis, when the cause of the abscess was typhoid ulceration of the ileum, a general ulceration of the cæcum, cancer of the ascending colon, or caries of the spine. All of these cases I have heard of during the last few months. It would have spared one gentleman using so absurd an expression as pseudo-appendicitis, when he found the vermiform process healthy—a term only comparable to many other meaningless words, as non-desquamation, nephritis, or uric acid diathesis. There certainly have been many pseudo-diagnoses.

I will now mention another disease to illustrate my point. But lately a person of eminence was said to have died of angina Ludovici—a disease characterized by inflammation and suppuration of the different tissues in the neck. This has always been recognized here ever since I was a student, and one of the treasurers of the hospital died of it. I believe it was long before described by one of the surgeons of St. Bartholomew's. Now, long after this, Niemeyer stated in his lectures that it was first noticed by Ludwig, and therefore he proposed to call it Angina Ludovici. This was too good a mouthful to be lost, and so was at once adopted. This disease will ever be remembered by me in connection with the name of Hilton. You all know his book on "Rest," edited by Jacobson. He was a man of singular powers of perception, so that there was not the commonest disease which he did not make of great interest when he looked at it. I remember his being called to a case of this angina, in order to perform tracheotomy if necessary. After looking at the patient some time, he asked if anyone perceived any obstruction in the larynx to warrant the operation; he saw none, and added if the respiration and movement of the chest were watched, it was evident from the want of mobility in the lower part that the phrenic nerve was involved in the inflammatory process. We all accepted the diagnosis as a remarkable piece of acumen.

Now I must allude to another instance which affords a striking example of errors arising from the want of a good history of individual disease; I mean smallpox. This ignorance has given rise to the most acrimonious controversies in connection with vaccination. Smallpox, you know, is one of the most virulent, horrible and fatal disorders and is constantly held up in comparison with cowpox, the mildest of complaints, and which may be substituted for it for the purpose of immunity. Now it must be remembered that the disease is taken by breathing the air containing the poison, but it may be produced in another way, by inoculation through the skin, when it is the mildest of complaints. This apparently depends upon the different times of incubation in the two cases. Students sometimes speak of toxines as if they resembled such mineral poisons as arsenic or oxalic acid, which produce very rapidly marked specific effects, but these animal poisons are of a totally different kind. They are elaborated in the system after many days from the time of their introduction. After the injection of the toxine of diphtheria, you often see marked symptoms within a very short period, very different from those of slower development observed in the disease when caught in the usual manner. In smallpox, the poison after being absorbed by the lungs takes twelve or fourteen days before it becomes manifest in the

system, and then sometimes has become so virulent that it rapidly necroses the blood, and the patient dies of universal hæmorrhage in a few hours. Now, if the same smallpox lymph is inoculated into the skin the hatching time or incubation is only eight days, then the system becomes affected, there is slight fever and perhaps a mild eruption, but this is all. The incubation is exactly the same as that of cowpox, and the other symptoms in the two affections closely resemble one another. In every particular they run the same course of equal mildness. When Lady Mary Montagu introduced the inoculation process into this country she said she had seen thousands of persons similarly treated in the East without a single death. Cowpox therefore is strictly comparable with the inoculated form of smallpox, and not with that which is ordinarily taken through the lungs. Why they differ I cannot say, but apparently it is due to the time of incubation, one being nearly double that of the other, and this again may be due to the mode of entrance and the tissues first affected. I mention this disease as showing how a forgetfulness of the two forms has led to serious consequences. It ought, of course, to suggest to bacteriologists and experimenters generally the possible difference in the time of incubation and consequent virulence in many other specific diseases according to the mode of introducing the virus.

Another instance occurs to me where we have suffered from a want of a good history of disease; the ligature of arteries. When I came here as a student I found the silk ligature in use except in some cases where a metallic one was employed, and I well remember the time it took in tying the vessels on the flap of a stump after an amputation. After some time new methods came up, notably one introduced in Scotland, and I remember my colleague, Cooper Foster, travelling to Aberdeen on purpose to see its practical application. It was a new method of running a needle under the vessel and passing a thread over it, and this was called acupressure. After this came the improved method of arresting hæmorrhage by torsion of the vessel, the process now generally adopted. Now, I ask, how came this to be new? Long before my time, and notably in the year 1829, you may read that a discussion took place in the Academy of Science, in Paris, on this very practice. The report says that the celebrated surgeon, Amussat, introduced a method of arresting hæmorrhage without the aid of the ligature or compression. His plan was founded on the common experience of lacerated and contused wounds not being attended by hæmorrhage. He took the forceps, and with his finger and thumb twisted it round five or six times and stopped the bleeding. In the English and foreign journals, which appeared afterwards, cases were reported which proved the complete success of the new method. Why it was abandoned for many years and then revived again I cannot imagine. My knowledge of its history does not suffice to afford an explanation.

It may be that there is no reason, that we are the mere victims of change and of the most powerful influence which actuates mankind as well as the whole animal kingdom. When a sheep jumps over an imaginary obstacle and the whole flock does the same, they are following the dictates of a law which is seen in its most intense form in the human family. Just as a particular kind of woman's gown and bonnet, or man's hat or trousers comes in and goes out, so it seems to me that certain diseases and remedies in like manner come in and go out—opium goes out, bromide comes in, that goes out and chloral comes in; this subsides and suphonal appears, and so on. Long before my time digitalis was much in use; when I was student, only occasionally given; then it came in again as a new discovery. How little was known of its use by the profession I have every reason to remember by the reputation and fees it often brought me. Arsenic was used in former times in neuralgia and anæmia. When I was a student, I only remember it given in skin diseases. For the affections just named it was rediscovered. Ipecacuanha was brought to England more than two centuries ago as a remedy for dysentery, and received the name *radix anti-dysenterica*. I only remember its use in pulmonary complaints; but a few years ago it was discovered as a remedy for dysentery.

For all these changes no rational cause can be given. We as scientific men are subject, like all other people, or in fact, to the whole animal kingdom, to the inexorable law of imitation. Just as the leader of the flock jumps over an imaginary hurdle, all the other sheep do the same, so a French philosopher when asked what is society, he answers "Société c'est l'imitation."

We cannot escape the effects of this inflexible law, and often have nothing more to say than the lady in Corny Grain's song, when asked why she had such a long dress and large hat, replied, "They are worn so."

The Chairman then called on Mr. MacIlwaine for his paper on—

AN ATTEMPTED DEFINITION AND CLASSIFICATION OF DISEASES ON THE BASIS OF CAUSATION.

"The Science of Medicine holds the promise of the future."

Mr. President and Gentlemen, — The practitioner of medicine plays two parts; in one he is brought into intimate relation with his patients, in the other he stands quite aloof from them. I was puzzled how to describe in a few words the vitally important side of our professional life that is hardly touched on in this paper, when Guy's Gazette supplied exactly what was wanted. It reminded us at the same time that Guy's, indeed the whole profession had to mourn the loss of a worthy and very promising member. A few years ago, on such another opening night as this, a paper was read before this society which dealt with the side of professional life in which the personality of the practitioner is a factor of the first importance. The author said:—"In all our relationships we should remember that kindness, gentleness and sympathy add to the true value of skill, and

that though the powers of the head are great, the powers of the heart are greater. We can do much by our abilities, but more by affection; and although we now have to live in wearied hope, yet it is not the possible only but the perfect we should live for; ever bearing in mind that greatness is to take the small things of life and walk grandly among them." No one, I venture to say, has ever better described the duty of the practitioner as a minister to suffering humanity; sad it is, yet there is consolation in knowing that an old Guy's man here wrote a true epitaph for himself.

The other part which the practitioner has to play is that of the scientific man, and here, as I said before, he stands—necessarily—quite aloof from his patients. The two spheres of activity, although each in turn engrosses the same man, can hardly be said to overlap, and they never mingle. It is with the scientific part that we are occupied to-night. The science and the humanity of our calling are in no sense antagonistic; on the contrary, each helps, each stimulates, the other; and it is our duty and our great privilege to cultivate both to the very utmost of our powers. Remember, then, that scientific attainments, however useful, however necessary, constitute the smaller part of the practitioner's equipment; but bear in mind also, for the advancement of our profession that the "science of medicine holds the promise of the future."

Although it is a futile, even a dangerous thing, to attempt to separate the theoretical, sharply, from the practical, so as to avoid the one and cultivate the other, yet, as a nation, we have ever a wholesome regard for practical things, and a wholesome disregard for chimerical things. I desire, therefore, to prove to you that the definition and classification of diseases are not only possible, but of the greatest practical utility, even necessity to the practitioner; and I am addressing you as future practitioners. Let me point out some of the differences between hospital and general practice. Everything in this hospital is arranged on the best possible plan, that is, on the basis of enlightened practical experience. Everything is, most properly, subordinated to the primary object of the hospital, namely, the greatest good of the greatest number of patients. The hospital is in no sense a scientific laboratory. You have here a naturally developed and practical specialism, which works admirably. It does not matter in the least, so far as hospital routine is concerned, what you understand or do not understand by disease or diseases, or their causation; but as students of medicine, as future practitioners, it matters everything to you.

For practical purposes, cases are divided in the hospital into medical and surgical, and beyond that into groups appropriated to special departments. Now imagine yourselves launched into general practice where, so far as regards your patients, you are, in the first instance at least, necessarily thrown upon your own resources, Diagnosis now becomes a very different matter. All the practical distinctions between medical, surgical and special cases suddenly disappear. The patient is out of health, and you have to treat him. Then arise such questions as these:—The patient is ill, he is suffering from disease in general, also from a disease in particular. Before treating him, I must make a diagnosis—science must precede art, otherwise I am a charlatan. What is a diagnosis? It is the naming of his disease. But what is his disease? Now you come face to face with the question, What really is a disease? You will find one day as self-dependent practitioners, that these apparently purely theoretical considerations of definition and classification are stern realities which you will have to face. You must therefore look on this paper as containing, not any instruction or even attempted instruction in medicine, but some thoughts that have forced themselves on the mind of a general practitioner about what is called dry science. Remember that the mind of the practitioner must, of necessity, range over the whole field of human ailments, regardless of their arbitrary—if sometimes convenient—division among medicine, surgery and all the ologies, a division which represents something quite real to you while at the hospital, but which proves a broken reed in practice.

And now let me try to give you an outline of what I am attempting to put before you this evening. As assistants of the hospital staff you are concerned with the art of medicine. You are helping in the great work of relieving human suffering. For practical work, practical methods are necessary, and here you find them resulting as usual in division of labour and highly-cultivated special skill. In the midst of all this practical work—this mass of detail, you must still remember that the art of medicine is founded on the science of medicine; that you have two parts to play, and that, unless you lay a broad and deep foundation of science, all your art will be but a house built on sand.

If I now attempt to answer these questions in the following order, it will give you a clue to the line of thought to be followed. Are we justified in speaking of a science of medicine? What is disease, and what are diseases? And finally, are diseases susceptible of arrangement on the basis of a scientific, or, in other words, a natural classification, so that the practitioner may have a standard by which to measure his knowledge of every departure from health?

First, then, are we justified in speaking of a science of medicine? For the moment, of course, the art of medicine is left out of account. Science is knowledge of natural phenomena. Our knowledge of diseases, however imperfect it may be, is just as definitely a branch of science as are astronomy, geology and natural history. Do not be confused by any attempted distinction between exact and inexact science. The whole republic of science has one plain boundary; those inside it seek knowledge of natural phenomena, those outside seek knowledge of something else. Medical science, in that it deals with man's diseases, is an offshoot of natural history, and the particular lesson for which we are indebted to natural history is this:—Mortal man, whose diseases we study, is but an evolved

animal; from his conception until his dissolution he is but a part of nature; his place in nature has been fixed beyond dispute. It follows—and this is the foundation of medical science—that man's diseases, which are certain reactions taking place between him and his surroundings, are natural phenomena, resting, like other natural phenomena, on a physical basis, and due to the play of natural forces. Medical science is concerned with knowable phenomena, and with nothing else. On this fact we base our indisputable claim to belong to the great republic of science. The acceptance of uniformity and continuity in geology, and of the natural origin of species—including the evolutionary descent of man—in natural history, has completely revolutionized those branches of science within the last forty years. Our acceptance of the fact that all disease has a physical basis would in a similar way clear the medical atmosphere, and lead to the adoption in medical science of a scientific method.

Next, what is disease and what are diseases? I would ask you to leave out of account for the moment any preconceived ideas you may have as to the meaning of these words, because there is generally a strange ambiguity in their application in medical literature. In Dr. Taylor's text-book this statement occurs: "It has never been very satisfactorily determined what is to be called disease and what are to be called diseases." This is the clearest and most concise statement I have met with on the subject in any introductory chapter or elsewhere. Other writers occupy many paragraphs, and even pages, in arriving at the same conclusion, yet shrink from stating it.

If, therefore, these words, "disease and diseases," are to be employed in medical literature—and how can they be omitted?—it seems clear that a meaning should attach to them which can be understood of all men, lay and professional. As soon as we apply the principle of natural, physical causation, it is possible to define disease and diseases. Disease in general means any departure from the healthy state; and a disease in particular may be defined as the pathological results of an interference with the physiological state by a disease-cause. A few examples will make the definition quite clear. The ingestion of lead beyond very moderate quantities may lead, among others, to these pathological results—colic, paralysis, arthritis, granular kidney, tremor, dementia, and so on. Lead-poisoning is a disease—everything morbid, whether structural or functional, which follows the ingestion of lead in the individual under consideration is part of a disease. It follows that colic, paralysis, granular kidney, arthritis, dementia, are not diseases according to the meaning here attached to the word. Typhoid fever is a disease. The symptoms may vary within very wide limits in number, and in severity in different cases; but the patient in whom the typhoid microbe is parasitic is suffering from a definable disease. In gout, again, we have a disease belonging to another class; it is not due to a microbe, it is not due to the ingestion of a poison; the cause is intrinsic, some of the man's metabolic functions have got out of order, and he therefore manufactures his own poisons. Gout is the result of a function-failure. Gout and typhoid are types of the two main divisions into which all diseases naturally fall, namely, those in which the cause is intrinsic, and those in which it is extrinsic, in origin. You will hear it stated that every disease is due to many causes, for instance, that bad ventilation is one of the causes of phthisis, and that chill stands in the same relation to pneumonia. This statement arises from a want of definiteness in the use of the word "cause," which is on a par with the prevalent vague use of the word "disease." It is ridiculous, or worse, to speak of circumstances which lead up to a definite result as on the same footing with the essential and only possible cause of the occurrence. In the absence of the tubercle bacillus, people may crowd as they please, but tuberculosis will not occur; neither can any degree of chill cause pneumonia in the absence of the pneumococcus to play the part of parasite. Disease and diseases have, up to the present time, not been satisfactorily defined, because our practical men have not troubled about the matter, and our scientific men have not quite rid their minds of metaphysics. When approached, as all other natural phenomena nowadays, in every other branch of science are approached, that is, from the physical side—diseases are seen to be comprehensible, definable entities.

Germ diseases, and intoxications where the toxic agent is of extrinsic origin, are already handled in a manner worthy of medical science; the time has come to extend the same scientific method to all diseases whether the cause is of extrinsic or intrinsic origin.

And now there remains only the third question. Can diseases thus defined be classified on the natural basis of causation? This chart shows roughly the idea associated with such classification.

Let me now explain, even if this involves some repetition, that this chart is not nearly so great a novelty as it may look at first sight. Take four examples of what are by universal consent called diseases at the present time. Typhoid fever, cirrhosis of the liver, asthma and eczema. In typhoid fever you have the cause in the parasitic microbe, the pathological results you are all acquainted with. It is indeed a self-defined disease, and I think you will agree that my definition fits it—the pathological results of an interference with the physiological state by a disease-cause. When we diagnose cirrhosis of the liver, and demonstrate its anatomy, we are apt to smile at those who used to diagnose jaundice without perhaps troubling about its anatomy, but the difference is rather slender. When the cirrhotic liver is recognised as part of the disease alcoholism, for instance, it is in its proper place beside ascites, jaundice, hæmatemesis and other pathological results of a known cause; but when we call cirrhosis a disease of the liver we have no right to smile at the men who called ascites a disease of the abdomen, and hæmatemesis a disease of the stomach. Next, asthma, a so-called diseases sometimes ascribed to the lungs, sometimes to the nervous

system, still a recognised disease, a well-known symptom-group. To mention only two of many varieties, contrast a plethoric middle aged man with a neurotic history, who does something indiscreet in the way of feeding and consequently has to live in an atmosphere of fumes all night Contrast him with an old lady who has never been guilty of neurosis, but who is nevertheless attacked in precisely the same way. Anyone can see that she has asthma, and so she also is nearly stifled with mixed fumes before it is discovered that her asthma is only a symptom of granular kidney, itself again a pathological result of some undiscovered cause. Is it not evident that unless we wish for dire confusion we must not seek to apply the word disease at one time to a symptom-group of undefined causation, such as asthma, cirrhosis, or Bright's disease, and at another to a group of symptoms bound together by a defined cause into a defined entirety, a disease, such as tuberculosis, gout or alcoholism? A word with two meanings is useful in riddles, but it is out of place in science. But think of eczema having the same status in science as lead-poisoning or typhoid. Were it looked on as a symptom, eczema would be interesting and instructive; as a disease it is, if possible, a more intangible phantom than asthma. It is called a disease no doubt because it is not health; the common sense of the public tells them further that it is a disease of the skin, and the general practitioner can supply the address of the dermatologist. Indeed, eczema is so clearly his property, and its treatment is so satisfactory—to the dermatologist—that no one, so far as I know, is likely to trouble himself seriously about the cause of this so-called disease of the skin. And now you can see that this chart represents only an attempt to level up the rest of medical science, as expressed in classification, to the standard already reached in the very large groups represented by typhoid and lead-poisoning. When it is agreed that the cause must be defined before the disease can be named—although there will still be plenty of work to do—we shall all have the inestimable advantage of recognising much more clearly than we do at present, what we know and what we do not know. The practitioner will then have a standard by which to measure his knowledge of every departure from health, a standard which is not supplied to him at present.

A reference to the symptom-groups of undetermined causation will perhaps help you still further to follow the meaning of this classification. Myxœdema, for instance, is surely, you may say, a disease of the thyroid gland. Cirrhosis of the gland is the cause of the symptoms. But cirrhosis points to toxæmia, and every toxæmia has a cause. There is no such thing in this classification as a disease of any particular gland, organ or locality. The morbid anatomy of an organ ought no longer to be accepted as the cause of a disease. The discovery of the cirrhosis may satisfy the person who is interested merely in the special pathology of the thyroid; the administration of thyroid extract may satisfy the patient and the therapeutist; but the practitioner wants to know the cause of the cirrhosis before he can treat or even name the disease. How can you hope to prevent myxœdema till you get at its cause? And remember that the maintenance of health is the ultimate goal of the practitioner.

Then I must refer quite briefly to the pathological museum as it is, and as it might be. For expressions now in use, such as diseases of nerve, of bone, lung, heart, and so on, would be substituted special pathology of nerve, bone, lung, etc., and special pathology would not be relied on in the arrangement of the specimens. In the museum arranged on the basis of classification according to causation, you would find every demonstrable lesion attributable, for instance, to syphilis, tubercle, lead-poisoning, etc., arranged under the head of each disease. The student who had passed through a pathological museum arranged on the definite basis of defined diseases, would surely go into practice with a useful general idea of the pathological changes and their natural groupings round their causes, of which he was starting in pursuit.

Summarizing is risky, but in order to leave on your minds the gist of this, necessarily, somewhat discursive paper, I may attempt it in this way. I told you at the outset that the practitioner plays two parts: so does the student; in fact the student is a practitioner, and the practitioner is a student. On the one hand, your first duty is to the patients; for practical purposes, for routine hospital work, you are taught to classify them into medical, surgical, gynæcological, aural, dermatological, and so on. This is done that the division of labour, the practical specialism of the executive staff, may come into play. At the same time you are playing the other part of students of medical science. Although they are so intimately connected, so thoroughly inter-dependent; yet the medical school, as distinguished from the hospital, must be recognised as an institution for the scientific training of the general practitioner. Look, therefore, always as future practitioners at diagnosis from the two sides, the practical and the scientific. Medical, surgical, mental, neurological, laryngological, and so on, represent a purely arbitrary arrangement of patients for practical purposes of treatment; this has no relation whatever to diagnosis from the scientific side—from the general practitioner's point of view. In the wards, at the out-patients, in the pathological museum, in text-books and lectures, in every channel of instruction that is open to you, so far as I know, your pathological materials are all arranged on the basis of an arbitrary classification of undefined diseases; if indeed such unrealities can be said to be classified. Ideas derived from the practical methods that work so well in the hospital are carried over almost intact to be applied in the scientific teaching of the medical school. In practice you will find out for yourselves that nature groups her pathological results round physical causes; she defines and classifies diseases for us if we will but keep our eyes open.

I should not have ventured to bring forward my reflections on these subjects—which lie at the very root of medical science—but for two considerations. In the

first place, looking back after eleven years of practice to the five years spent here, I am convinced that the vocation of the general practitioner demands for its proper fulfilment a grounding in a unified science of medicine, which the medical schools do not at present offer him. In the second place, however small the intrinsic value of my opinions may be, I am conscious that they are based on a study of nature. And this reminds me that there is nothing new under the sun, and so all that is to be said amounts only to what we all know, and are told over and over again by those who have gone before through these thousands of years, and it is this: That the pursuit of science consists in the single-minded self-forgetful study of nature.

Mr. F. C. Curtis said he was sure he would have their cordial approval in rising to propose that they give a hearty vote of thanks to Mr. MacIlwaine for the most interesting paper he had given to them that night. He imagined that the matter which Mr. MacIlwaine had brought before them was new to most of them, and he thought they should learn from the careful and systematic thought, which they must notice had been the cause of the bringing together of that paper. It was all important to them in the future that they should cultivate a systematic method of regarding the science which they had taken up. The present classification of disease was, he supposed, a purely artificial one, and for that matter, the classification which Mr. MacIlwaine had proposed to them was also to a large extent artificial, and must remain so until the causation of disease was more fully understood. It seemed right, however, that the cause of diseases should form the basis of a classification of diseases, just as it must form the basis of the scientific treatment of diseases. The third blackboard before them, on which Mr. MacIlwaine had written the symptom groups, was rather suggestive. It reminded him of the yokel at a Bible class who, when the teacher classifying the prophets, asked where they should put Hosea, shouted from the back of the class, "Put him here, guv'nor, for I'm clearing off!" (Laughter). Mr. Curtis concluded by expressing his pleasure in proposing the vote of thanks. (Applause).

Sir Samuel Wilks described the paper to which they had listened as very clever and highly scientific, but at the same time, he thought it was open to criticism. For his own part, he liked the good old plan of classifying diseases according to phenomena. He repeated that the paper was a very clever and interesting one; but he believed that if Mr. MacIlwaine came there ten years hence, he would alter it, and alter it yet again after another ten years.

The vote of thanks was warmly accorded.

Mr. F. G. Gibson said he had been entrusted with the pleasant duty of proposing a vote of thanks to Sir Samuel Wilks for occupying the chair that evening. Sir Samuel had a marvellous fund of reminiscence and knowledge, and any words which fell from his mouth must prove of interest to them. They felt that in him Guy's possessed an honourable link between the present and the past. Sir Samuel Wilks had spoken of the necessity of an encyclopædia and medical history, and one felt while listening to him that if by some process a mental skiagraph could be taken in which the memory of Sir Samuel Wilks could be crystalised in tangible form, they would have that encyclopædia. Their President had appealed to the younger men to write such an encyclopædia, but he (Mr. Gibson) felt that if some of the younger men did not make haste, Sir Samuel would do the work himself. The surgeon said that "The age of a man is the age of his arteries," and if they were to depute some local light here, such as Dr. Bryant, to feel Sir Samuel's pulse, he was sure Dr. Bryant would assure them that their President's radial exhibits a vitality equal to his vigour in controversy, whether with the ravages of disease in the past or the vagaries of Borough Councils in the present. (Laughter). They felt that in Sir Samuel they had a man whose life, spent in one long research after knowledge and truth, constituted him an ornament to his profession and an honour to that hospital. He therefore asked them to express by acclamation their pleasure in seeing Sir Samuel Wilks there that night. (Loud applause).

The President, in responding to the vote of thanks, expressed his great interest in the welfare of the Physical Society. One never knew at his age when the end would come, but as long as he lived, if they were pleased to ask him, he would be very happy to come and meet them again. (Applause.)

The company then adjourned to the laboratories, where the usual exhibition of surgical instruments, microscopes, books, &c., were on view, and light refreshments provided.

Pass List.

University of Durham. September, 1901.

Doctor in Medicine.—V. Pendred, F. W. Rowland (for Practitioners of Fifteen Years' Standing), W. R. Etches, E. G Hunt.

Third Examination for the Degree of Bachelor in Medicine.—B. Glendinning, M. C. Wetherell.

Second Examination for the Degree of Bachelor in Medicine.—J. G. O. H. Lane (obtained first-class honours), A. V. Maybury.

Appointments.

CIVIL.

Byford, W. F., L.R.C.P., M.R.C.S., has been reappointed Officer of Health to the Ruthin Town Council.

Howell, John, M.B., B.S. Lond., F.R.C.S. Eng., has been appointed Honorary Surgeon to the Cheltenham General Hospital, *vice* Dr. Bramwell, resigned.

Passim.

We are officially informed that arrangements are now in active progress for the promulgation of a fresh Appeal on behalf of the Hospital for Funds, and the Plan of Campaign will probably be sufficiently formed for publication in our next issue. It is, of course, a fact familiar to many of our readers that this Appeal, which will simply be in continuation of that of 1895–96, would have been launched long ago but for the unfortunate series of public events which have relegated the cause of home charities to comparative obscurity. The Treasurer is asking for £180,000 wherewith to cover the cost of the permanent works and additions which have been in progress these few years, and for increased voluntary support up to £25,000 per annum. The latter can be provided either in the form of annual subscriptions or gifts to the Re-endowment Fund.

The customary "going off" dinner, with its attendant festivities and customs, was as hearty a gathering as is wont on these occasions. After the usual speeches, full of regret for the retiring members of the board, the important duty of electing the new President and officers for the coming three months was proceeded with. After a prolonged suspense, Mr. Stamm announced, amidst hearty applause, that Mr. French would succeed him in the President's chair, and that Mr. Cross had been elected Vice-President in the place of Mr. Holmes. The new President's speech was full of promise of good things to come. We have only to mention the revival of the Residents' dance, and the institution of a dramatic performance. After the more serious matter was disposed of, an hour was quickly passed by speeches of the lighter order, and the evening was wound up by an impromptu concert, at which Mr. Parrott made a welcome reappearance.

On the following evening the more dignified Annual Students' Dinner was held in the Dining Hall. Dr. Pye-Smith was to have filled the chair, but to the general regret of everyone was unavoidably prevented from coming amongst us, his place, however, was ably taken by Dr. Taylor. The speeches, interspersed with music by Messrs. Faulks, Claxton, Parrott and Soper, with Mr. Holmes as accompanist, were heartily received by a crowded hall, and the whole proceedings went off with a capital swing.

Following the precedent of last year, the first meeting of the Physical Society was held on the first Saturday in October and not on the opening night of the session, to avoid the inconvenience of hastily finishing the Students' Dinner in order to rush over to the Physiological Building. We have been accustomed to regard these meetings as most successful, and the present was in every way as good as in former years. Once again Sir Samuel Wilks fulfilled the office of chairman, and although he disclaimed any idea of giving a formal address, his speech, full of reminiscences of the past, was listened to with eager interest, and his plea for a history of various diseases should prove full of stimulating suggestions to future writers on medicine.

Mr. Gibson, in moving a vote of thanks to Sir Samuel for occupying the chair, justly pointed out that if a history of medicine was to be written, as Sir Samuel so earnestly urged, that he himself was the right man to do it. His long connection with medicine and his untiring energy, combined with a most retentive memory for detail and reminiscence, render him peculiarly fitted for such a work. Sir Samuel has so often taken up the cudgels on behalf of older observers whose pioneer work was threatened with being lost sight of in the glare of more modern advancements, and so ably vindicated their claims as founders, that in a work dealing with the history of medical progress no one could better champion the cause of the older generation than he.

Once again we were given the opportunity of hearing an old Guy's man, who brought before us some views on medicine as seen by a general practitioner. This at present is, to a majority of us, a closed book, and any glimpse that may tend to illuminate the darkness of the future is most welcome. Mr. MacIlwaine's paper, which

we print on another page, was striking in its freshness and originality of the subject and its treatment, and the applause which greeted the author at the close of his paper clearly showed how much it was appreciated by the audience.

Some months ago there appeared in our columns an article on the open-air treatment of phthisis at London hospitals. During the past three months this treatment has been tried at Guy's. Two patients suffering from the disease in an advanced stage have been living, under the care of Dr. Hale White, on the balcony outside Philip, at first with no cover at all, but latterly protected by a temporary canvas awning. They have shown such marked progress that Dr. Hale White expressed his satisfaction in a letter which the Superintendent placed before the Court of Governors. It was proposed to provide additional balconies on the west side of the medical building. It appeared that the cost of the six balconies contemplated would be about £700, from an estimate made by the hospital surveyor, and two of our Governors, Mr. Robert Gordon and Mr. Herbert Raphael, expressed their readiness to share the expense between them. The names of these gentlemen are already well known as benefactors of the hospital and the school, and the present gift shows what a keen interest they have in the work of Guy's.

The recommendations of the Committee on the Army Medical Service, which have been published this week, have on the whole been most favourable received, although, of course, captious critics will not be wanting on this subject as on every other. It is not for us to comment on the scheme as a whole, but there are points which are of vital interest to men, still in their hospital career. who intend entering the service. One of the most important alterations to intending candidates is the reduction of the entrance examination to a purely clinical and practical examination. The candidate will no longer be worried by having to cram subjects he has long passed by, and which would be of very doubtful service in his after career. Another wise concession is, that should a candidate pass into the service while holding a resident appointment at a civil hospital, the time spent in completing his office will be allowed to count towards his period of service.

Inducements are held out to officers to perfect themselves in special branches by increased pay for proficiency in any they may choose to take up. Leave for study has been arranged for at intervals, and examinations instituted at each grade. The report concludes with two most important suggestions, viz., that serious cases should, as far as is practicable, be concentrated at the larger military hospitals for purposes of advice and instruction, also that a large military hospital and an attached staff college should be instituted.

By the retirement of Mr. H. L. McGavin, Guy's has lost one of the most popular surgical registrars the hospital has ever had; his success as a teacher was foreshadowed whilst assistant demonstrator of anatomy, and the crowd that every day accompanied him round the wards, testifies far more emphatically to his ability as a teacher of surgery than any words we may write. Amongst the many experiences he must carry away with him from Guy's, we hope that one of the pleasantest will be the knowledge that the trouble and pains he took with the men, as surgical registrar, have been fully appreciated, and that all Guy's men who knew or worked under him join in wishing him the best of good luck in his future work at other hospitals.

The new Surgical Registrar, Mr. G. S. Simpson, is too well known to need any introduction from us; his career at Guy's has been one string of successes, beginning in 1894 with the Entrance Scholarship in Arts for dental students. Having taken his L.D.S., he came over to the Medical School, where he quickly came to the front, and in 1896 he was Assistant Demonstrator of Anatomy. Entering the wards in July, 1897, he did the usual appointments; having completed these, he became Clinical in 1899, and during the summer of same year passed the conjoint. He was appointed A. H. S. in the front surgery in September, and followed this up by H.-S. to Mr. Lucas. Amongst all this work he has found time to carry off the gold

medals for clinical surgery and medicine, and the senior prize for general proficiency, and only recently we had to congratulate him on passing the final fellowship.

A further list of honours awarded for services in the South African campaign has been published, and we note with great pleasure the names of more Guy's men and nurses figuring there. Mr. S. E. Denyer is rewarded with C.M.G.; Captain Pilcher, R.A.M.C., has gained the coveted D.S.O., and Sisters Fisher and Lawrence have been decorated with the Royal Red Cross. Mr. S. J. Redpath, who will be remembered by many men, after being reported dead, has received the Distinguished Conduct Medal for his services with the Natal Mounted Rifles. Mr. Corfe, one of the dental surgeons, who went out to the front a few months ago, was in one of the trains which was wrecked lately, but fortunately escaped with the loss of his outfit. He was taken prisoner, but was released a few hours afterwards.

The football season is once more upon us, and the trial games have been played, with the object of unearthing fresh talent. In the Association games there were several forwards who shewed promise, and a few half-backs; but up to the present no one has been discovered that looks like making a really good back to fill the place left vacant by Robson. It is yet too early to predict the men who are likely to be chosen to fill the empty positions.

The Rugby club is fortunate in having all but one of last year's team. Payne, who is a Cambridge blue, showed up well, and should prove a useful acquisition to the outsides. Allcock played well at three-quarter for the second fifteen in their first match, but must prove himself exceptionally good if he can displace any of our last year's four. A heavy and good forward has yet to be found to fill the place in the pack. There are several of the new men who seem to play a good game, but none of them have very much weight. However, with so many of our last year's team available, it is not too much to say that we shall have a really good side to represent us during the coming season.

In the first match of the season, against Kensington, we scored a signal victory, which augurs well, defeating them by one goal and five tries to nil. During the first half, in spite of several good runs, Guy's only got in once, the try being converted. In the second half of the game we had much the better of it, and added five more tries, but owing to the heavy wind none of the kicks at goal were successful. McEvedy was the chief scorer. The success was marred by an accident to French, who most unfortunately fractured his internal condyle. He has been most unhappy in his experience of hospital football, and to him all will extend their sympathy and best wishes for a speedy and complete recovery.

Hearty congratulations to Mr. A. F. Kertz, of Magdalen College, Oxford, on gaining the Senior Scientific Scholarship for University Students, and to Messrs. P. S. Mills and W. H. Trethowan, who carried off the Junior Scolarship in Science. In Arts we have to congratulate Messrs. C. Mayer and M. J. Rattray on getting the scholarships of £100 and £50 respectively.

In view of the present rush to get vaccinated, it is interesting to read in a recent book, "The Soverane Herbe," which tells the story of tobacco and smoking; how the people at the time of the first plague sought safety by smoking at all times and in all places. It is recorded that men smoked at church, at council meetings, in the House of Commons; women smoked: children were sent to school with a pipe of tobacco instead of breakfast; in fact, the proper method of smoking even became part of the school curriculum. The man who reads this book with his arm red and swollen must be tempted to doubt whether scientific advance is altogether an unmixed blessing.

We wish to draw the attention of men, particularly freshmen, to the letters of the respective secretaries of the Chess Club and the Students' Glee Club. Both of these institutions are in a very flourishing condition and are about to start a new season, and recruits will be welcomed. The latter club holds practices on Friday evenings at 5 o'clock, and occasionally

later, at 8 p.m. The first practice will be on Friday next, and should any new men interested in music wish to join, they should turn up on Friday, or give their names to the secretary or one of the committee.

The Annual General Meeting of the Students' Club will be held on Wednesday, November 30th, at 4.15 p.m., in the Physiological Theatre, Dr. Pye-Smith being in the chair.

The following letter, addressed to the House-Surgeon, may provide food for thought to some of our readers :—

"Dear Sir

The writing of the "Press" regarding a case or two where operations were calculated upon—brought me to think out a very simple illustration which I entirely leave to your consideration namely. I compare "Life" with 'an ordinary Candle,' its '*extinguishing flickers*' I watched studiously many times and in each case compared it with a 'Dying Person.' Still the motive of writing had its beginning only of late. I argued with myself thus —If the least of air or movement cause the extinguishing of the Candle, must then produce the same effect on a dying (as quoted) Person in that state as handled the 'Press' as I refer to no other case. If then the least movement (so near death) end the life of such a Patient, can then an operation prove successful? If a Candle were operated on a few hours before its actual end, (of course I mean a Dying Person) would result not be more satisfactory then waiting up to nearly the last minute? when each touch of an instrument or the moving of the body to the Operator's requirements ends his life?

"This illustration though humble and simple may lead the way to the finding out of the secret so much sought for by how many thousands.

"I am your humble servant,

F. S."

We are pleased to see that Mr. R. R. Terry has been appointed organist and choirmaster at the new Westminster Cathedral. Mr. Terry was of great service to the Disguysed Minstrels in the days of their infancy, and his election to this important post will be hailed with delight by many of the men who knew him.

A circular-letter is being issued, a reprint of which appears in the present issue, giving notice of a proposed recognition of Mr. Collier's services at Guy's by a presentation to him. We feel sure that the appeal has only to be known to past and present men, and many will gladly avail themselves of the opportunity of testifying their admiration of Mr. Collier's work.

The Annual Students' Dinner.

The Annual Students' Dinner was held on the evening of the "first" and was largely attended.

Dr. Pye-Smith was called out of town at very short notice, and Dr. Taylor took his place as chairman.

In giving the toast of "The King," Dr. Taylor remarked that our present Sovereign, when Prince of Wales, was respected, loved and honoured, and was none the less so since he had ascended to the throne. In toasting Queen Alexandra and the Royal Family, the Chairman spoke of the goodness and devotion to duty, and attractiveness of the Queen herself, and of the love and affection in which she is regarded by the British community. He specially referred to "Our President, the Duke of Cornwall and York," and to his royal partner, who they hoped would some day be King and Queen of Great Britain and Ireland, and sway their sceptre over whatever Colonies might be added to our great Empire.

The Chairman next proposed "The Students' Club." After explaining that Dr. Pye-Smith had been quite unexpectedly called out of town shortly before the meeting, he went on to say there was no doubt about the success of the Students' Club, which was now something like twenty years old. He was very glad to see it so full of vigour and activity, and of the many good qualities it possessed, and he had no difficulty in recommending it and asking them to drink its health. Their presence there that night was conclusive proof of their interest in the Club. He wished it every success, and trusted that the Students' Club of Guy's Hospital might be a pattern to every other Students' Club in the metropolis.

The next toast proposed was that of "Guy's Hospital" itself. In bringing it before the notice of those present, Dr. Taylor mentioned that Guy's (the material structure) was now 176 years old, and had been greatly altered and improved within recent years. In a sense, Guy's Hospital was part of them all, and they carried it with them, as it were, to whatever part of the world they might go. They might look at the institution in different aspects. There was that part of it which carried out the primary objects of a hospital in curing the sick and healing or ameliorating the pains and troubles of suffering humanity. Anyone on the Staff knew what a large number of letters were sent from all the corners of the earth asking for patients to be admitted into and thereby receive the benefits of Guy's Hospital—benefits which were as patent and as great as those of any other hospital in the kingdom. Then there was the students' side of the hospital, and the feeling of good fellowship and mutual loyalty that existed amongst them was one of the prominent characteristics of Guy's. Moreover, it was an old saying that "Wherever you go, whether to New Zealand, or Timbuctoo, or Greenland, or Kamtschatka, or even to the North Pole, there you will find a Guy's man." They knew to their cost that

there had been a great many Guy's men in South Africa. They might perhaps know that a Guy's man was at that moment accompanying the Duke and Duchess of Cornwall and York at the other side of the Atlantic. Guy's Hospital is being well nursed, added the Chairman. Mr. Bonsor is looking after the old lady, and I think it is quite likely that her youth will be renovated and that she will lose the reproach, if it is a reproach, of being quite so old, and come out in a few years more vigorous and more perfect in every respect. I have much pleasure in proposing the toast of "Guy's Hospital," and coupling with it the name of Mr. Bonsor. (Applause.)

Mr. Cosmo Bonsor, in responding to the toast, said he always considered it a very high honour to have his name coupled with Guy's Hospital, and it was a great pleasure to him to come to Guy's when they first met at their October session. They welcomed a certain number of old students; they met also a number of new faces who came to inaugurate a career in which they and Guy's Hospital would, no doubt, be honourably associated in the future. He had had the privilege that night of sitting next to the president of the cricket club, and had been assured by him that the new students were a goodly set, and that Guy's was sure to keep the football cups and the cricket cup. He (Mr. Bonsor) had four sons, all good cricketers, and he was informed that at the hospital there were something like a hundred students, all excellent cricketers. We will make a match for next summer, and I as challenger will name the situation where it shall be played—my own property, where you can have the best possible pitch and the best of umpires. (Laughter and applause.) But he had been asked to respond to "Guy's Hospital." He would like to say, on behalf of the lay portion of Guy's Hospital, how much they appreciated the work that was being done, not only there, but throughout the world, by those who had been students and trained within the walls of the institution. Dr. Taylor spoke of South Africa, and there was one amongst them that night, Mr. Denyer, who had been distinguished for having gallantly done his duty in the field there. (Applause.) Last year they had welcomed home from South Africa their friend, Mr. Fripp, who had a great deal to do with the Students' Club, but was not present with them that night. They were also extremely proud to see Dr. Washbourn—(applause)—who had returned home, and who made a great name for himself in South Africa, and for the school where he learned to work—Guy's Hospital. Their friend, Mr. Fremantle, was also amongst them. (Applause.) He could say a great deal about the ladies who had been trained in Guy's Hospital wards, but this he would declare—that at no time in the history of the hospital had it and those connected with the institution been doing a greater work in the cause of humanity and science, and civilisation, than at present. With regard to the future, they desired that Guy's should take the precedence of every hospital in the world, and they looked to those who had served in the wards and done their duty to the hospital in the past, to provide that one miserable thing, without which they could neither exist nor look forward, namely, *money*. They knew that so long as all connected with the hospital did their duty, they would be supported by the public. (Applause.)

Mr. French, as representing the residents, proposed the health of Dr. Taylor. He remarked that he was ward clerk under Dr. Taylor for his first three months, and he enjoyed it very much. (Laughter.) A few of them might possibly also be ward clerks under Dr. Taylor, and as they went round the wards they might not be quite certain what Dr. Taylor did or did not think about them. Nevertheless, at the end of three months, he was sure, they would be better than at the beginning. The words by which they wished to express any sign or symptom, or appearance of the patient, would be strongly criticised, and they must learn the right ones. As to physical signs, they would by that time be quite master of them. But he advised them to avoid two things if they came under Dr. Taylor: First, in bringing forward their own views on the subject of œgophony—they must have no views on œgophony at all. (Laughter.) In the second place, he advised them not in any way to discuss what is, or what is not a proper dose of the tincture of digitalis. (Renewed laughter.) Mr. French spoke of the good feeling which existed between the students and the staff, and also said that the students at Guy's had a good deal of freedom which he thought was not common to students at all other hospitals. That was due to the staff. Moreover, the staff always took an acute interest in the doings of the students, whether in the hospital itself or on the football field, or elsewhere, and as a representative of that staff, in the name of all the residents and students of the hospital, he expressed their cordial thanks to Dr. Taylor for occupying the chair that night. (Applause.)

Dr. Taylor, having thanked them for the hearty reception that they had given to the toast, said he would try not to ask too many of their opinions on the subject of œgophony. (Laughter.) He did not remember very many of his clerks having ventured or attempted to express opinions on the subject. It was a subject that had seriously disturbed the mental attitude of his clerks. (Laughter.) Dr. Taylor proceeded to say that he had the greatest pleasure in supporting in his small way all those institutions of which Guy's men were proud. He was very pleased to support the athletic institutions, and last year he attended the Inter-hospital Sports and expressed the wish that they might be better attended. Dr. Taylor concluded by again thanking them for the kind way in which they had drank his health. (Applause.)

Mr. Cosmo Bonsor said there was one particular toast that they would wish to honour to-night, namely that of their friend Dr. Shaw. (Applause.) They could not allow Dr. Shaw to pass from his position as Dean of the Medical School, without expressing on this occasion their gratitude to him for his past work, and their fervent hope

that he might have health and happiness in his retirement of *otium cum dignitate*. (Applause.) During all the years that he has been Dean, on these occasions he had been extraordinarily mysterious, and had apparently passed on that tradition to his successor, Dr. Fawcett, who would not give him (Mr. Bonsor) the slightest information as to "entry day." Without knowing in the least what the "entry" was likely to be, he thought they might congratulate Dr. Shaw on what he had done for the School in the past. (Applause.) They were all grateful to him for his work, they would drink his health, and at the same time they would hope that his mantle had fallen successfully on Dr. Fawcett. (Applause).

Dr. Shaw said that looking back upon the nine years during which he had been Dean, he had enjoyed himself immensely. This enjoyment had been due to the uniform kindness that he had received from them as students, and from his colleagues on the staff. Mr. Bonsor kindly thanked him for the way in which he had performed the service of Dean. His colleagues on the staff had also thanked him. But he felt it was for him to thank them for the way in which, during his office as Dean, they had lightened what might have been very considerable labours. When he had conferences, as he often had had, with his fellow deans of other medical schools, and when they came to him and asked "How do you manage this?" and "How do you manage that?" He said to them "I do not know how we manage to do it, but it gets done." The reason was because he had experienced that very great spirit of friendship which Mr. French had already alluded to as existing between the staff and the students. There was no doubt that that was largely responsible for the great success at Guy's. While the staff allowed the students much freedom, the students, on the other hand, never encroached upon it. He could only say in conclusion that he thanked them most heartily for the way in which they had drank the toast, and particularly he desired to thank them all for the way in which, during the period of his office as Dean, they had lightened his labours. He was quite confident they would extend to his successor the kindness which they had always extended to himself. (Applause.)

"Auld Lang Syne" was sung and the evening brought to a close.

Guy's Hospital Medical School.

The following Entrance Scholarships and Certificates have been awarded:—

Senior Science Scholarship for University Students.—£50, Mr. A. F. Kertz, Magdalen College, Oxford; and Certificates to Mr. W. M. Mollison, King's College, Cambridge, and Mr. E. C. Hughes, Clare College, Cambridge.

Junior Scholarships in Science.—Mr. P. S. Mills, Dulwich College, and Mr. W. H. Trethowan, Plymouth Technical School and Guy's Hospital, £105 each: and a Certificate to Mr. C. M. Wenyon, University College, London.

Entrance Scholarships in Arts.—£100, Mr. C. Mayer; £50, Mr. M. J. Rattray, King's School, Bruton, Somerset, and Certificate to Mr. T. E. A. Carr, Lancing College, Sussex, and Mr. K. J. Saunders, Clifton College.

In Lighter Vein.

GUY'S HOSPITAL MUSEUM.

Time—A.D. 2000.

[Note.—Many years ago, owing to the fact that all patients seen in the front surgery were either taken in, or sent to infirmaries, in order to prevent scandals and accidents, the out-patient department was closed, and has lately been utilised as a museum for curios of local interest. The following are a few of the choicest exhibits.]

Resident (Mummy).—An extremely rare and finely-preserved specimen of a vanished class, whose extinction dates from 1901, A.D. It is, therefore, of highest interest to the anthropologist and comparative anatomist. Its duties are now performed, perhaps more effectively, by the Sisters of the wards. When alive, it commanded the love and admiration of the whole nursing staff, and towards the close of its career was engaged by the Syndicate Halls to give exhibition performances of the now obsolete arts of browsing, etc.

Pair of white cotton socks (Early Edwardian).—Supposed by some to have belonged to a former President of the Royal College of Surgeons. Other authorities maintain that they were President Kruger's night socks, and were captured at Pretoria by a former student of this hospital.

Commissioner (petrified).—It will be noticed that this beautiful exhibit holds 2s. 6d. in the palm of his right hand. This specimen was found a few years ago in an old drain. In a pocket of the costly robes in which the corpse was swathed several slips of paper with the words, "I haven't drunk your health lately," were found. Their elucidation is now occupying the minds of experts.

Fragment of red tape.—Found encircling an ancient manuscript, entitled "Method of conferring house-appointments." Although moth-eaten, it provides food for reflection for earnest students of this hospital.

Manuscript of a clinical lecture, entitled "The Bloated Bullet."—Supposed to have been delivered by some member of the staff in close touch with military affairs. Indeed, in the course of the discourse (which does not touch on surgery or medicine) the lecturer casually remarks that he knows several majors and, at least, one colonel.

THE BIRD OF PREY.

Correspondence.

To the Editor of Guy's Hospital Gazette.

Circular Letter.

Dear Sir,—You are probably aware that, through ill-health, Mr. Collier, our Senior Dispenser, has placed his resignation in the hands of the Governors, who, in accepting the same, have awarded him a pension on the higher scale, as a mark of their appreciation of his faithful services.

It has been thought that some recognition should be made to Mr. Collier by the Staff and his fellow-workers at the hospital, of the consideration and courtesy he has shown in carrying out the duties of his office during the twenty-seven years he has been at the Dispensary.

It is proposed to ask for subscriptions for this object, limited to one guinea, to place the names, only, of subscribers thereto in an album, and to purchase a piece of plate for presentation to Mr. Collier, with a suitable inscription.

I have been asked to take charge of the subscriptions, and should be pleased to receive your own if it is your wish to be associated with this proposal.—Yours faithfully,

HENRY WILLIAMS, Clerk.

Counting House,
Guy's Hospital, October 6th, 1901.

Physiological Society.

Dear Mr. Editor,—Will you kindly insert in your columns an account of the second general meeting of the Physiological Society, which was held on October 3rd.

It was decided that in future the Society should meet on alternate Thursdays during the Winter Session, and once a month during the Summer Session at 4 o'clock.

The following officers were elected for the year 1901–1902:—President: Dr. Pembrey; Vice-Presidents: Dr. Beddard, Dr. Spriggs; Secretary: M. de L. Robinson; Committee: T. Cook, A. O'Brien, E. W. Routley, P. R. Bolus, H. F. B. Walker.—I am, Dear Sir, yours faithfully,

M. de L. ROBINSON, Hon. Sec.

Students' Glee Club.

Sir,—Will you allow me to make known through your columns, especially for the benefit of freshmen, that the Students' Glee Club will start practices on Friday, October 18th. Men who take any interest in choral singing are cordially invited to attend, and it is hoped that many new members will join.—Yours, etc.

H. McD. PARROTT.

[Several letters are held over from lack of space.—Ed.]

Sport.

Rugby Football.

A trial game was played at Honor Oak Park on Wednesday, October 2nd. A large number of players turned out, and both sides numbered more than the regulation fifteen.

Of the new hands, Payne, the Cambridge Blue was noticeable at half-back, whilst W. G. Pinching, E. L. Ward and F. Cutler all displayed good form.

All the old hands appear to have retained their form, and seeing that we have fourteen out of last year's Cup team available, we ought to have a very successful season. From the number of playing men about the Hospital, there ought to be no difficulty in turning out four fifteens every Saturday.

GUY'S 1st XV. v. KENSINGTON.

Played at Wood Lane on Saturday, October 5th. A strong wind was blowing almost directly across the ground, and rain came on during the last quarter of an hour.

We won the toss, and Tolhurst (who made his first appearance) kicked-off, the wind being slightly to Kensington's advantage. We had most of the play at the commencement, and from a mis-kick by their full-back, Morgan nearly got in. We continued to press, and a good bout of passing by our three-quarters resulted in Morgan scoring, he himself converting the try. The wind was blowing strongly towards our left wing, and McEvedy and O'Brien on the right got very little to do in the first half, Morgan being very conspicuous and more agile than ever. Our forwards got the ball from the scrum repeatedly, and with Payne doing excellent work at half, our three-quarters were continuously on the move, but without any success; just before half-time, as the result of a forward rush, we nearly scored by means of McEvedy, he being stopped only just in front of the posts. Half-time:—Guy's, 1 goal; Kensington, nil.

The wind now increased and veered round considerably in our favour, and play was confined almost entirely to their half of the ground. Almost immediately on re-starting, O'Brien gave McEvedy an easy chance, which the latter availed himself of, scoring in the right-hand corner, but the difficult angle and strong wind were too much for Morgan in his attempt at goal. The game now resolved itself into a series of attacks by our men, and we scored twice quickly in succession by means of Morgan and McEvedy. Kensington never looked like scoring except on one occasion, when Morgan had to save in front of the posts, the ball having been brought up the field by their forwards. McEvedy got in again shortly after at the corner, Payne having given him an easy opening, but this try, as all the others in this half, was unconverted. A regrettable accident occurred just before the finish, French who has been singularly unfortunate on the Wood

Lane ground, chipping a piece off the internal condyle of his left humerus. Morgan scored once more just on the call of time, leaving us winners by 1 goal and 5 tries to nil. Team:—

Guy's.—E. M. Harrison (back); E. Morgan, L. J. J. Orpen, A. O'Brien and P. F. McEvedy (three-quarter backs); O. V. Payne and M. G. Louisson (half-backs); H. A. Cutler (captain), R. C. Lawry, A. R. Thompson, H. S. French, B. Glendinning, T. B. Layton, H. M. Tolhurst and H. Watts (forwards).

Referee:—Mr. P. Coles.

Remarks.—The forwards in this match were decidedly weak, this is hardly to be wondered at when we were without Thomas, Anderson and Milsom. There must be more solid scrummaging if we wish to keep up our excellent record of last year. On more than one occasion there were as many as five or six men up in the front row of the scrum, and in consequence there were few decent scrums throughout the game. There was more than one man hanging outside the pack, and against a good lot of forwards the result would have been very different. Of the new forwards, French and Layton were the best, the former playing very hard until he had to retire. Of the backs, Payne, in whom a great interest was taken, will, on Saturday's form, prove a great acquisition to the team. Both halves suffered from the slovenly heeling out of the forwards. The three-quarters showed us occasionally a glimpse of the form one expects to see of them nowadays. Harrison played quite in his best style. The place kicking was poor with the exception of an attempt by O'Brien.

GUY'S 2nd XV. v. KENSINGSON "A."

This match was played on Saturday, October 5th, being the first of the season at Honor Oak, and resulted in a win for Guy's by 3 goals, 2 tries (21 points) to nil.

Guy's won the toss, and play was mostly in the Kensington half. From a rush by the home forwards, Ward scored an unconverted try. Allcock and Burney each made good runs, and just before half-time Brown scored out on the touch-line. Rendall kicked a magnificent goal.

In the second half Guy's played better against the wind, and Ward, Featherstone and Burney scored. The first two were converted by Rendall and Walker. Team:—

Guy's.—C. D. Pye-Smith (back); Allcock, J. T. Hicks, W. H. Burney and H. S. Brown (three-quarter backs); F. E. Walker and A. E. Kynaston (half-backs); T. P. Thomas, D. W. Trail, C. J. Pinching, A. L. Moon, E. L. Ward, J. W. Featherstone, R. M. Rendall and A. R. Beaumont (forwards).

Referee:—Mr. K. V. Trubshaw.

Remarks.—The forwards played a good game, and obtained the ball more often than their opponents. They followed up and tackled well. The halves were somewhat hampered by the offside tactics of those of the opposite side. The passing of the back division was very erratic. Allcock and Hicks made some good runs. Pye-Smith at back had not much to do, but was very safe.

Association Football.

It is a good omen for the season that "Soccer" men have early shewn their keenness by turning out in good numbers at the trial games, the freshmen, amongst whom are some good halves and forwards, being particularly numerous, so that there seems little doubt that the vacancies in the first eleven at forward, half, and back, will readily be filled. Now that the matches are beginning, and the cup ties will soon be upon us, it cannot be too strongly urged upon all men to go down as often as possible to Honor Oak and train, as fitness is the surest guarantee of a successful season.

From the Gazette's Special Pathologist.

H.A.C.C., Saxmundham.—The urine contained a very distinct trace of albumen, and in the centrifugalised deposit there were a considerable number of coarsely granular and hyaline casts, together with a few of the epithelial variety. There were also numerous renal cells and a few red blood discs. No crystals were seen.

H.V.R., Fordingbridge.—No tubercle bacilli were found in this specimen.

H.L., Manchester.—This growth is a periosteal sarcoma, originating from the lower end of the radius, which is almost surrounded by it. The bone is extensively invaded, and there is ossification in the deeper layers of the growth. Histologically, it is soft sarcoma, composed of round and oval cells.

W., Middlesbrough.—No tubercle bacilli were found in this specimen.

PATHOLOGIST.

Births.

CRAPPER.—On August 14th, at the White House, Hanley, Staffordshire, the wife of Harold Sugden Crapper, L.D.S., M.R.C.S., L.R.C.P. Lond., dental surgeon, of a son.

PEAKE.—On October 4th, at the Limes, Marden, Kent, the wife of W. Harland Peake, M.D., B.S., of a daughter.

Marriage.

SAMWAYS—SIM.—On September 26th, at Kensington Chapel, Allen Street, W., by the Rev. C. Silvester Horne, M.A., Daniel West Samways, M.D., M.R.C.P., D.Sc., of Mentone, to Sarah Sophia, widow of the late Captain A. D. Sim, Argyll and Sutherland Highlanders, and youngest daughter of the late J. C. Bolton, of Carbrook, Argyllshire.

Deaths.

HOSKING.—On September 27th, at Deniliquin, N.S.W., Australia, Rosalie Black, wife of John E. F. Hosking, Esq., M.R.C.S., L.R.C.P., and youngest daughter of Joseph Hinton, Esq., Batheaston, Bath.

KING.—On September 30th, at 23, Highbury Park, N., Charles King, M.R.C.S. Eng., aged 76.

Ed.—D. G. G.

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Calendar of Coming Events.

October, 1901.

Sat. 26.—Messrs. Lucas and Lane's take-in; Drs., E. Faulks and H. T. Palmer; Cl., A. C. Ransford.
1 p.m., Clinical lecture by Dr. Pitt.
G.H.R.F.C. I., Racing Club de France, Paris.
II., Shaldon, home.
III., Kensington III., away.
G.H.A.F.C. I., West Norwood, away.
II., West Hampstead 2nd XI., home.

Mon. 28.—1.15 p.m., Clinical lecture by Mr. Lucas.
Final M.B. Lond. Exam. begins.

Wed. 30.—1.30 p.m., Clinical lecture by Dr. Perry.
G.H.R.F.C., III., Royal School of Mines II., away.
G.H.A.F.C. I., Royal College of Science II., away.
II., Royal College of Science II. 2nd XI., away.

Thur. 31.—G.H.C.U., Address by J. H. Lowe, Esq.

November.

Fri. 1.—Messrs. Golding-Bird and Dunn's take-in.

Sat. 2.—1 p.m., Clinical lecture by Dr. Pitt.
G.H.P.P.S., Paper by P. T. Manson on "Some Tropical Diseases seen at the Albert Docks."
G.H.R.F.C., I., Rosslyn Park, away.
II., Boro' Road College, away.
III., Catford Bridge II., home.
G.H.A.F.C., I., Weybridge, away.
II., Kenley (reserves), home.

Mon. 4.—1.15 p.m., Clinical lecture by Mr. Lucas.

Wed. 6.—1.30 p.m., Clinical lecture by Dr. Horrocks.
G.H.R.F.C., II., St. Bart.'s II., away.
III., Tonbridge School II., away.
G.H.A.F.C., II., R.M.A., 2nd XI., away.

Thur. 7.—Messrs. Jacobson and Fripp's take-in.
Primary Fellowship Exam.

Sat. 9.—1 p.m., Clinical lecture by Dr. Pitt.
G.H.R.F.C., I., Croydon, home.
II., Beckenham, away.
III., Wasps III., away.
G.H.A.F.C., I., Townley Park, away.
II., Cheshunt 2nd XI., home.

Guy's Hospital Gazette,

OCTOBER 26, 1901.

On an Abdominal Tumour.

CLINICAL LECTURE BY DR. PITT.

October 5th, 1901.

Gentlemen,—I propose discussing with you to-day a case, the diagnosis of which is still obscure. Although the patient has been in the hospital two months, there has been a great divergence of opinion expressed as to what is the nature of the tumour; but, at the same time, the case opens up several interesting questions which may be worth discussing.

The patient is a married woman, twenty years of age, who had her first child on the 27th November last, and she complained during January, 1901, of pain in the left side of the abdomen. In February of this year she had a blow on the left side of the neck; and had, when she came into the hospital, under Dr. Taylor, a mass of glands in the posterior triangle on the left side of the neck, which was fairly movable, with an irregular surface, and measured two inches from without inwards, and extended for one and a half inches above the left clavicle. The tumour did not vary in size, and there was some difference of opinion as to what was the cause of the enlargement of the glands—as to whether they were tuberculous, or in an early stage of Hodgkin's disease, or possibly malignant. The temperature sometimes rose to 102°, the pulse was rapid, and on examination of her chest the signs do not seem to have been very constant. Dr. Cleveland, however, tells me that on several occasions there were râles about the right base which did not

clear up. On examination of the blood, the red corpuscles numbered 4,500,000, and the white corpuscles 8,000, so that there was no leucocytosis, and nothing specially noticeable. In February Mr. Symonds removed these glands, and he thought they were tuberculous. Sections, however, were cut, and on microscopical examination there was no definite evidence of tubercle. They consisted of small cells, but showed no giant cells and no caseation, and it then even remained a little uncertain as to whether the mass was due to Hodgkin's disease or whether it was a lymphosarcoma.

The patient went home, and remained perfectly well until the end of July, that is to say, during three months, at least, she was quite well. She then complained of an attack of severe pain across the left side of the abdomen, and found she had a mass in her abdomen. She vomited two or three times, and on admission her temperature was raised to 102°. She was admitted on July 28th. At that time the scar in the posterior triangle of the neck was quite healed, but two glands could be felt, and there was also a small gland palpable in each axilla, but there was no evidence of the involvement of any other glands. On examination of her abdomen, it was found that she had a large mass which occupied the umbilical, to a certain extent the epigastric, but mainly the left hypochondriac regions. The tumour was an irregular flattened mass extending on the left side under the margin of the ribs and to the loin, and below about an inch to the right of the umbilicus and about one inch below, both the surface and the margins were irregular. Apparently the condition of the tumour has not altered very much from the date when it was first noticed, that is to say, from two months ago up to the present time. There is no doubt that it must have been growing for some time before it was noticed, but the change since it was first noticed has been extremely small.

As to the physical characters of this tumour. The tumour occupies the umbilical, the left hypochondriac, and the epigastric regions, and its surface is distinctly irregular. It measured six inches across and seven vertically. It is also stated in the report that those who examined the patient, finally came to the conclusion that they could feel the spleen extending one inch below the margin of the ribs, independent of this tumour. There was a little notch noticeable at the upper part of the right edge, and another less definite one lower down, and certainly at the present time the margin of the tumour is somewhat sinuous and irregular. The outer margin of the tumour is distinctly sharp and hard, and not at all like the rounded, thick margin of the spleen. It moves slightly on respiration, and on palpation may be freely moved manually from one side to the other. But as compared with the appearance generally presented by an enlarged spleen, it undoubtedly crosses the middle line very much sooner than an enlarged spleen, as a rule, does. An enlarged spleen, as you know, has an axis which, being vertical when it is small, tends to become tilted as it enlarges, and when you have a very large spleen, instead of the lower end of the spleen being in the left iliac fossa, it crosses the middle line and appears in the right iliac fossa. But it must be very exceptional indeed for the spleen to cross the middle line above the umbilicus, and not to extend more than one inch below. Again, on comparing it with a renal tumour, it is extremely rare for a renal tumour to cross the middle line so as to be detected there by palpation. Some enormous malignant renal growths will extend just over the middle line, but a tumour like the one which we are specially considering, and which extends in the way I have described, is almost certainly not a kidney.

On percussion the tumour is dull, the colon crosses below its lower margin, and the stomach apparently lies above it. The descending colon apparently lies to its left. (Since the lecture was delivered the colon has been distended with air, and has been shown to be to the left of and below the tumour, and the stomach lies above.) A renal tumour carries the descending colon up with it, and the colon is then on the anterior surface and not entirely on one side. Although you can push your hand slightly under the ribs, you cannot reach above the tumour, and it certainly seems to extend up well under the margin of the ribs. The tumour has no con-

nection with the pelvis, and is entirely independent of the liver; the spleen does not extend much beyond the margin of the ribs, but when the patient takes a deep breath, can be felt coming down quite independent of the tumour. For the most part there has been no tenderness. I shall point out directly that she has had several attacks of pyrexia, and when the temperature has been raised there has been pain. When free from these attacks, she has had neither pain nor tenderness. As to the chest, when the patient was admitted, the left apex appeared to move indifferently, the breathing seemed harsh, and a few crepitations could be heard in the third space on either side. On several occasions râles were found at the right base; still, the physical signs in the chest were not very prominent, and do not seem to have increased during the time the patient has been in. The circulatory and the nervous systems are normal, and the urine for the most part has been normal, but on two occasions there has been a trace of albumen.

As to the effects of this tumour. There is no evidence of any digestive disturbance; there has been no vomiting and no interference with digestion. On removing the contents of the stomach after a test breakfast of bread and butter, with tea, the fluid was found to give ·1 per cent. of free acid; there was no lactic acid and albumoses were found to be present. There was therefore no evidence of any marked deficiency of hydrochloric acid, and there certainly was some pepsin.

There is no evidence that the tumour has in any way interfered with the lumen of the colon. There has been no intestinal obstruction, and no evidence that there is a growth in the colon. There is no jaundice and the mass has not affected the liver in any way. We have not been able to feel the kidney independently of the tumour, but on examination bimanually the tumour does not seem to extend far back into the loin, and, as far as one is able to judge, it apparently is not in any way connected with the kidney. With regard to the two occasions on which it is stated that slight traces of albumen were present, it may have been due to leucorrhœa. The specific gravity of the urine is perfectly normal, and there is no blood in it. So that the probabilities are that the function of the kidney has been in no way interfered with.

Since the patient has been in, practically there has been very little change. There have been, however, four periods in which she has had more marked pyrexia; on the 31st July and for three days the temperature varied from 103° to 101°, and on August 11th, for eight days, it varied from 100° to 102·8°. Between these periods the temperature was absolutely normal. For some time again, on the 6th September, there was a period of pyrexia for five days, the temperature varying from 100° to 103°, and on the 22nd September there was another period of six days when the temperature varied from 99° to 102°. So that during the months of August and September there have been, on the whole, twenty-nine days—almost half, you see—in which the temperature has been raised; but between these periods it has been absolutely normal.

The tumour, for the most part, has been painless, and on only two or three occasions when the temperature has been raised has the patient complained much of pain. On one of these occasions she had a considerable amount and required morphia; but within a few days the pain passed off, and no actual change seems to have taken place. Comparing the condition of the tumour now with its condition when the patient was admitted, it is very doubtful whether there has been any appreciable change; it may possibly be a little larger. There has been no peritonitis, and the physical signs remain the same, excepting that we notice now that the entry of air on the right side of the chest is deficient, and some râles have been audible during the time that she has been in the hospital. There has been no cough nor expectoration, and we must watch and see whether the mischief at the right apex is persistent.

The patient has been under the care of several of my colleagues, and many diagnoses have been discussed, but in spite of the watching of the patient, at no time has any positive conclusion been reached. The questions of renal and gastric tumours, of mesenteric and pancreatic cysts, were discussed when she first

came in. Later on it was thought possible that the condition might be due, judging from the result of the examination of the glands removed, to Hodgkin's disease, and latterly the question was raised as to whether, after all, this mass might possibly be a splenic tumour. The blood has been examined on two or three occasions, and on no occasion has there ever been any leucocytosis; but the hæmoglobin and the red blood corpuscles have been materially reduced in amount. The examination gives the red corpuscles at 70 per cent. and the hæmoglobin at 60 per cent. of the normal, there is therefore no characteristic change with regard to the blood. On the whole, the patient has lost weight and is weaker, and not quite so well as she was. The leucocytes latterly have been about 6,800, and the red corpuscles 54 per cent. of the normal.

Now to discuss some factors which have to be considered in coming to a diagnosis with regard to such a case as this. First of all, in examining the abdomen of a patient, it is very important to have the abdominal wall well relaxed, to have her lying in bed with raised legs, and the head slightly raised, and then taking care that your hand is warm, and distracting the patient's attention, pass your hand over the abdomen with very little pressure at first; and gradually, while the patient takes deep breaths, exerting more pressure, you may make out the relations of the tumour, its mobility and tenderness, and note the resistance of the abdominal wall. In many cases, when dealing with a tumour on one side of the abdomen, you can make out more than you could otherwise, by turning the patient over slightly to the opposite side and examine bimanually, having one hand in the loin with which you push the tumour forward and the other in front of the abdomen. This applies more particularly when you come to compare a tumour which has started in the kidney with a tumour in connection with the gall-bladder, or the intestine.

Having examined the patient in that position, the next thing to do, when you are dealing with a splenic, renal or hepatic tumour, or an aneurysm, is to get the patient on to elbows and knees. In cases where you are dealing with a tumour of the gall-bladder, or an hepatic tumour, you will find that it is more readily felt when the patient is leaning forward. In order to differentiate between a tumour pressing on the aorta and an aneurysm of that artery; when the patient leans forward the transmitted pulsation is lost in the former case, and persists in the latter. In comparing a renal with an hepatic tumour, you will find that the prominence of the hepatic tumour is very much more marked in this position than is the renal tumour; the latter tends to fall back to the loin, whereas the hepatic tumour does not. When you have a tumour in connection with the spine, or when you have a pancreatic tumour, it becomes much less obvious when the patient is on her elbows and knees. When the abdomen is rigid and where there is still considerable doubt, give the patient an anæsthetic, and when the wall is relaxed make your examination.

In some, more particularly perhaps with pancreatic cysts and renal tumours, a good deal may be learnt by distending the colon and the stomach with gas. A pancreatic cyst lies either (1) behind the stomach, (2) behind the stomach and colon, (3) or behind the colon, but rarely below it. If you distend the stomach by giving the patient the two parts of a Seidlitz powder separately, you can map out the relation of the stomach to the tumour. There are very few tumours which lie behind the stomach; almost the only tumours found there are growths in the spine, retroperitoneal cysts, cysts of the small omentum, and pancreatic cysts. With regard to pancreatic cysts and renal tumours, you can learn a great deal by pumping in air or water into the rectum and mapping out the change in resonance which takes place with the distension of the colon.

The next thing is to look round and see what collateral evidence there is of mischief elsewhere. With regard to the question of malignant growths in the abdomen, very often the first external evidence of such growths is in the small gland which lies behind the left sterno-mastoid. In obscure cases of intra-thoracic growth, or growth in the abdomen, a nodule

of growth in this gland may be the first indication to put you on your guard. It is very seldom that a nodule develops in the right gland. This nodule occurs more particularly in malignant disease of the œsophagus, malignant disease of the mediastinal glands, and of the stomach and pancreas, and, sometimes in malignant disease of the peritoneum. In our present patient, the gland involved was a gland lying far back in the posterior triangle; the gland behind the sterno-mastoid was quite normal. Then, occasionally, in cancer of the stomach, the glands in the groin become enlarged, although it is a little difficult to explain why the secondary deposits should appear there. In many cases you can also make out the glands along the aorta and in the pelvis.

For Hodgkin's disease, you should examine the superficial glands generally. As a rule, Hodgkin's disease begins with some of the superficial glands, such as those in the neck or groin, but a certain group of cases begin with the intestinal glands, and we ought to bear in mind that, as a rule, when lymphadenoma involves the mesenteric glands, they are generally so soft that you are apt to overlook them. The question was raised as to whether, in this woman, the mass was due to Hodgkin's disease, but it is much too hard and localized.

The next thing is to hunt over the skin and see if there are any nodules of growth in the subcutaneous tissue. Nodules of growth in the subcutaneous tissue are not at all infrequent in connection with cancer of the stomach, colon or pancreas, and occasionally in connection with cancer of the breast. Of course, it is common enough for cancer of the breast to involve the adjacent tissues, and occasionally you may find disseminated nodules scattered pretty widely. But, for the most part, cancer of the skin is rather in favour of a primary growth in the stomach or pancreas. There are a few cases in which the growth has been in the colon, but not nearly so frequently.

The testicle is another organ which should always be examined, because you sometimes find that a growth in the testicle may be the source of a very large and rapidly growing mass in the abdomen.

Of course, in women you should always examine the breast. The patient may have had the breast excised, or there may be quite a small nodule of growth in the breast, and this may be the source of an enormous mass in the abdomen.

The next two factors are the questions of the temperature and of nutrition. The majority of malignant growths take place without much pyrexia, but it is not unusual for growths in the liver, if they are at all rapid in development, to have periods in which there is more or less slight pyrexia. Occasionally, when there is a large mass of growth in the abdomen, the patient may, quite independent of growth in the liver, develop pyrexia. But in such, you generally find that it is due to a growth undergoing degenerative changes, and sometimes to sloughing. It is not at all an infrequent condition to find an abscess in the abdomen as a result of these changes. In a certain number of cases of growth, for instance, in the colon, where the surface of the growth ulcerates, absorption may go out from this ulcerating surface and pyrexia result. When growth spreads from one part of the bowel to another, so that a fistula develops between two coils, or when a piece of growth between the coils suppurates, in these cases you would probably find pyrexia.

Another cause which we must not overlook is the great liability, when there is any malignant disease, for thrombosis of the veins to occur. One of the first ideas that should pass through your mind, if a middle-aged patient has a thrombosed vein, is the possibility of there being some malignant disease in the body. There is no doubt that when malignant disease is present there is an increased liability to thrombosis, and if thrombosis occur in the abdomen you might have pyrexia. So much, then, for the explanation of pyrexia occurring in connection with malignant disease.

Where there are both a tumour and pyrexia the possibility of its being inflammatory in origin naturally occurs, also the possibility of its being tuberculous, and occasionally a patch of peritonitis over a malignant growth may be the cause of the rise in the temperature. Is the mass in this woman either

inflammatory or tuberculous? The examination of the blood is a very important factor. If the mass were inflammatory; for instance, if it were in any way connected with her confinement, the certainty is that she would have some leucocytosis. Although the blood has been examined on several occasions there have never been more than seven or eight thousand leucocytes per c.mm., and therefore we may safely say that the mass is not inflammatory. Another argument against its being purely inflammatory is its great mobility.

Is the mass due to Hodgkin's disease? The examination of the blood does not help us very much. In Hodgkin's disease, unless the spleen is involved and enlarged, you do not find any leucocytosis. Therefore, in discussing the question as to whether this tumour is an enlarged spleen due to Hodgkin's disease, we may certainly say that you could not have a spleen that size due to Hodgkin's disease without finding leucocytosis. This to a certain extent will limit our field, but, at the same time, there are several difficulties in giving a definite diagnosis.

As to nutrition. The patient has had this mass for two months, and lost weight slightly, but does not look extremely ill. Therefore, the probability is that it is not a vital organ that is affected. It is very remarkable how even a small growth in the stomach will set up the most profound anæmia and interfere with nutrition. But it is quite true that occasionally growths of the stomach may be overlooked, owing to the patient not being very ill; still, this is exceptional. As a rule, a patient who has a growth in the stomach becomes very anæmic and loses flesh. The probabilities are that as this patient's nutrition is fairly good, the mass has not originated in connection with the stomach.

To discuss now what are the possible causes of this mass. Occurring in the umbilical and left hypochondriac region we naturally think of the possibility of the mass being a splenic, renal, or suprarenal tumour, or a mass of growth which might have occurred in connection with the splenic flexure of the colon, or in connection with the larger curvature of the stomach, or in the omentum. These are the growths which might occur in that region; the mass may be tuberculous or inflammatory, and the possibility of its being a pancreatic cyst must also be discussed. The possibility of its coming up from below, and having in some way been connected with the pelvis, was at first discussed, but clearly it is not connected with that part.

We may put a pancreatic cyst out of court at once. This tumour is much more freely movable than a cyst, and, moreover, the tumour has a hard irregular edge, while the cysts are globular. A cyst of the pancreas is retroperitoneal, and always has either the stomach, mesocolon, or the colon in front of it. Sometimes the tumours have been behind the stomach, sometimes between the stomach and colon, and sometimes behind the colon, but one or other of these is always invariably in front of it. So that we need not further discuss the likelihood of its being a pancreatic cyst, although it lies behind or in the mesocolon.

Now to contrast the physical signs produced by a splenic and by a renal tumour. The long axis of a splenic tumour never runs across the middle line at such an acute angle as in this case. For the spleen to cross the middle line, it would necessarily have to be large enough to extend down to the right iliac fossa, so that the position of the axis is rather against the view of a splenic tumour. A splenic tumour never has the intestines in front; it is always against the abdominal wall, and is dull on percussion. The outer margin of the spleen is always large and rounded, and, as a rule, you can feel a splenic notch on the inner sharp margin when it is present. The mobility of the tumour depends very much upon adhesions, and in a large number of cases of leuchæmia a superficial peritonitis takes place, the tumour becomes tender, and the movement is limited thereby. But still a large splenic tumour is not fixed.

As to the relation of a splenic tumour with the colon. The colon is always behind or below it. The upper end of the tumour always, as it enlarges, tends to separate behind from the middle line, so that the tendency is for a splenic tumour to have an area at the back between the

spine and the upper part of the tumour in which there is some resonant lung. This is a very important point of distinction between a splenic and a renal tumour. A renal tumour does not cross the middle line, and has its axis vertical. A renal tumour will extend higher up than a splenic, lies close up to the middle line, and give no resonance behind between the spine and the tumour. A tumour of the spleen almost invariably retains the shape of the spleen; it is very rare that it forms an irregular nodular mass. The spleen is rarely extensively infiltrated with malignant disease, and consequently there is not the same tendency to irregularity that there is in some other tumours. It does not necessarily follow that because you have an enormous spleen you should have leucocytosis. You may have, in cases of hypertrophied spleen, either an enlargement of the pulp or of the trabeculæ. When the pulp enlarges leucocytosis develops, and the myelocytes are enormously increased in number. When the trabeculæ are hypertrophied, the total number of leucocytes is diminished so that they may become extremely scanty, and there is no increase in the myelocytes. The common form is the one in which leucocytosis is found.

A renal tumour generally presents itself in front rather than behind. If you examine the loin of the patient when prone, the normal depression is not filled up by a renal tumour, unless there is a perinephric abscess. When later on, there is inflammation outside the capsule, this depression disappears and the surface bulges. In cases of perinephritic abscess the prominence is most marked behind. A renal tumour is often first noticed an inch or two above the umbilicus; it very rarely is detected across the middle line, and it may vary in size. Many renal tumours, when there is no perinephric inflammation, are movable in all directions and they also move on respiration. A tumour on the left side tends to extend much higher up under the ribs than into the pelvis. You never see a renal, or a splenic tumour in which you cannot put your hand under its lower margin, but you cannot put your hand over the upper. I have seen a renal tumour extending on the left up to the top of the axilla, as high as the 3rd rib; whereas a splenic tumour never reaches so high.

The colon is always carried forward by an enlargement of the kidney. The tendency is for the colon to be carried to the front and perhaps slightly to the inner side of the tumour on the right side: whereas the tendency on the left side, is for the colon to be on the outer side of the tumour. The majority of renal tumours, more or less, retain the shape of the kidney, that is to say, an elongated oval mass, with no sharp edge either on the inner or outer side, and in many cases the dense capsule prevents the surface from becoming irregular. When there is malignant disease the tumour sometimes elongates out, but the shape of the kidney is very fairly retained in most cases, and in a considerable number the mischief remains limited within the capsule and does not set up any perinephric mischief.

Strong evidence against this tumour being renal is the fact that it crosses over at once to the right side of the middle line. The tumour, so far as the shape is concerned, is very unlike the shape of the kidney; the axis of the tumour is most unusually oblique, the outer edge is distinctly sharp, and the tumour is very much more movable laterally than is usual with a kidney tumour. Still, we cannot absolutely exclude the possibility of this growth being either a splenic or a kidney tumour, although the probabilities are more strong against its being splenic than against its being renal.

Then the facts that there is no leucocytosis, and that it is freely movable, makes inflammation extremely improbable. It is quite true that occasionally inflammatory masses form in the midst of the intestines, masses which are very freely movable, but in such case, within two months, the probabilities are, that it would have burst into the bowel or externally, and there certainly would have been leucocytosis.

Next comes the question of this tumour being tuberculous in origin. There is much to be said in favour of this view. The mass has remained for two months without altering at all, and the patient has had a gland removed in the neck which was suspiciously tuberculous, although not definitely so, and there are physical

signs in the chest of slight mischief, rather suggestive of phthisis. So that the possibility of its being tuberculous is one that has to be considered. Against the tuberculous view is the fact that the mass is a very large flat mass, which is difficult to understand if it is merely amongst the intestines with caseous material in the middle, but may be explicable if it is in the mesocolon; it is more freely movable than is usual for such a large tuberculous mass. I am, however, inclined to think that the tuberculous view is the most probable. This would explain the pyrexia and the absence of leucocytosis.

As to the question of its being sarcomatous growth in the stomach? There are two glands left in the neck which have not enlarged, and if it were a sarcoma it is very unlikely that these two glands would remain absolutely unchanged for months, and also that the mass in the abdomen would have at first grown so rapidly and then remained absolutely stationary for two months. So that there is much to be said against the view of its being a lymphosarcoma starting in the glands in the neck and then recurring in the omentum.

As there are no other glands to be found in any palpable place, excepting these two glands left in the neck, and the abdominal mass is hard, and there is an absence of leucocytosis, it is extremely improbable that this tumour is a case of enlarged spleen due to Hodgkin's disease.

As to its being malignant disease in connection with the stomach, the omentum, or the splenic flexure. A growth in the stomach may be very movable. Growths in the stomach may be divided up into those that involve the pylorus, those that involve the whole of the body, and those that involve the larger curvature. Those that involve the pylorus almost invariably lead to dilatation of the stomach and to the dropping of the pylorus in the abdomen. Normally the pylorus is not palpable, because it lies up under the margin of the ribs. Therefore, whenever you can feel a tumour, if it is in the pylorus, it necessarily implies that the stomach has been distended, that the pylorus has dropped, and probably that adjacent glands are also involved. Such tumours may become exceedingly movable. I have seen a tumour in the right groin which was looked upon as an ovarian tumour, but which turned out to be a tumour in the pylorus. A few months ago I had a case of tumour which occurred in this region to the right of the umbilicus, was about half the size of a fist, and which you could move from one side of the abdomen to the other, which turned out to be a growth in the pylorus. So that the mobility of a tumour and the fact of its being low in the abdomen do not exclude the possibility of its being in the stomach, and the fact of its being extremely mobile in front is rather in favour of it being situated there. There is no evidence to show that this tumour which we are specially considering has led to distension of the stomach, or is in any way connected with the pylorus; there has been no vomiting; nor it this a case of an indiarubber stomach. If there is a growth in the stomach, it is in the greater curvature, but one would think that the mass comes down rather low for it to be there, and the patient is neither excessively emaciated nor very anæmic. Therefore, we incline to the view that a vital organ like the stomach cannot be involved. Dr. Shaw has pointed out that in some of the rare cases of sarcoma of the stomach which have occurred, the diagnosis has been an enlarged spleen, the mass occupying very much the region that this tumour does, and being similar to it in appearance. So that while such a condition is possible I do not think it is probable here because the mass has remained unaltered for two months, and the patient's health has not very rapidly deteriorated.

Occasionally a growth occurring in the larger curvature of the stomach spreads through to the peritoneum. In a case under Dr. Pye-Smith a few years ago a large tumour occurred here which had originated in the stomach, and had spread down and formed a large mass which, finally sloughing, opened up above the diaphragm into the pleura.

Supposing the growth has started in the splenic flexure, you would expect a considerable amount of infiltration of the peritoneum, so that you finally get a large collection of intestine matted together and forming a tumour. But in this case it is very improbable that that could have occurred without the patient's

digestion being more or less disturbed and her having a more fixed tumour.

Then comes the question of its being some secondary deposit in the omentum. While that condition is possible, the fact that the tumour runs up right under the ribs makes it uncertain.

This, then, is a case worth discussing. It is not a case concerning which we can come to any definite diagnosis, but amongst the things that seem most probable are: First, that the mass is tuberculous; the possibility of a growth occurring in the omentum is a second view, and I do not think we can absolutely exclude kidney tumour, although such a condition seems extremely improbable.

As far as treatment is concerned, I do not consider that in the present condition of the patient we could benefit her by an operation, because the tumour is so large that it is extremely improbable that one could benefit her by an abdominal exploration.

In the Medical Wards.

THREE CASES OF COMA.

Joseph H., æt. 43, a bookmaker, was admitted on October 10th for coma. His relations knew nothing of importance about his previous condition. He was an intemperate man of irregular habits. Patient was standing outside a public-house in Billingsgate when he fell backwards suddenly, but some of his friends caught him before he reached the ground.

He was brought in comatose. On passing a catheter through a strictured urethra highly albuminous urine was drawn off.

On reaching the ward his temperature was 97°, pulse 100, respiration 20. The respiration was of the Cheyne Stokes type and stertorous. The pupils were smaller than normal but not very contracted, the right being if anything slightly smaller. Corneal reflex was present and the pupils reacted to light. No facial paralysis. Patient had a kyphosis in the dorsal region and lay on his left side. There was no rigidity. Voluntary movements were more marked on the right side but some were present on the left. There were fibrillary twitchings again more marked on the right side; flexor plantar reflexes; no ankle clonus: both knee-jerks were present and the left was more marked. His breath was very foul, suggestive of bad whiskey. Heart-sounds were normal, the lungs were full of sonorous rhonchi. Pulse not high tension but fairly strong.

In discussing the diagnosis the following were discussed, (1) alcohol poisoning, (2) post epileptic coma, (3) uræmic coma, (4) hæmorrhage or thrombosis. In favour of alcohol was the profound insensibility, rapid and strong pulse and heavy stertorous respiration with the depressed temperature, and the very strong smell of spirits; whilst against it was the presence of ocular reflexes, contracted pupils and the dry skin.

Against epilepsy was the absence of any fit, the unbitten tongue, and the lack of history which would scarcely have been missed by those who had lived intimately with him for two years. The low temperature is also a point against epilepsy.

With regard to uræmia, this again may have a sudden onset but nearly always follows a convulsion, the pulse is high tension and slow, and of course the presence of a great quantity of albumen was strongly in favour of uræmia, as also was the low temperature.

Hæmorrhage was considered out of it, from the absence of paralysis and the completeness of coma and low temperature. The pupils were not markedly unequal or very contracted, but the stertorous Cheyne Stokes' respiration and the condition of the skin pointed in favour of hæmorrhage.

On the whole, uræmia seemed the most likely diagnosis. Accordingly his stomach was washed out with water at a temperature of 115° very thoroughly, and a great quantity of foul-smelling material was brought away. Some warm water was left in. The pulse had improved a little, and the patient was beginning to perspire. The Cheyne Stokes type of respiration gave place to a deep stertorous breathing. A drop of croton oil in butter was put to the back of the throat, and he was then given a hot air bath at temperature 120° F. He perspired very freely. As his condition did not further improve and there was no sign of returning sensibility, he was venesected, and thirteen ounces was let. Into the other cephalic vein Oiij. of normal saline was injected. Later another minim of croton oil was given, but without effect. Some very slight alteration in his face was noted, the two sides not being quite alike, but nothing very definite could be made out. There was less movement on the left side, but during the venesection there was marked flexion once or twice of the left wrist.

A couple of hours later Cheyne Stokes' respiration returned, and the patient never rallied, but died about 6 a.m. the next morning.

Post-mortem.—Granular kidney, very slightly hypertrophied heart, hæmorrhage into the pons, which was filled with the clot, and a thin shell of white matter all round.

H. K. L.

James A., æt. 58 or 59, of no address and no occupation, was admitted into John, on October 16th, 1901, in a comatose condition. Family history is unknown.

Previous history. In 1890, he was admitted under Mr. Howse for concussion and aural bleeding, and went out soon afterwards quite well. Ever since the Tower Bridge has been open, he has slept there. Beyond this his previous history is unknown.

History of present illness. Patient was found unconscious on the pavement by the police at 10 p.m. on October 16th; the police say he could not have been there more than half an hour. He was immediately brought up to the hospital.

Condition on admission. Temperature (per rectum), 92°; respiration, 8; pulse, 32. Patient is grey-haired and sharp-featured, and on forehead is a recent abrasion the size of a penny. He was very dirty and covered with pediculi. He was in a comatose condition, but could with great difficulty be partially roused; he then tried to articulate, but the result was unintelligible. He was breathing nosily with a gurgling sound, and very slowly but not particularly deeply. There was no smell of alcohol or opium; no bleeding from mouth, nose or ears. Body was very cold and his limbs very rigid: there was no paralysis of his limbs. Pupils were small, right rather smaller than left; dilated slightly when a strong light was thrown on them. Corneal reflex present; knee-jerks present; when plantar reflex was tested, patient drew up his leg directly the sole of his foot was touched. Patient once or twice seemed to smile with the left side of his face only. There was incontinence of urine and fæces. Discs clear and well-defined; no hæmorrhages to be seen in retina.

A catheter was passed and dark urine drawn off, which was acid, sp. gr. 1034, sugar 4·6 parts per 1000; no albumen; gave only a slight aceto-acetic acid reaction with ferric chloride.

Two hours after admission, heart-beats could not be heard and pulse was imperceptible.

Next morning, however, he was better. Pulse 52, respiration 12, and quieter. He took his milk well; otherwise the same. Next morning he seemed just the same, but at 1 p.m. his pulse suddenly became much weaker and irregular. I. Strych. H. ɱv. was given, and brandy ɱxx. a few minutes later, but his heart-beats stopped and shortly after that his respiration.

In the ward, diabetic coma, cerebral and pontine hæmorrhage, and general paralysis were discussed.

Nothing abnormal was found post-mortem except hard and large kidneys, and a small isolated patch of fat necrosis near pancreas.

E. B., æt. 36, married, came into the hospital with the following history:—"She was returning from a convalescent home. When she got out of the carriage at London Bridge Station she had a fit. She fell down, threw herself about, and rolled her eyes. She then became quite unconscious and was removed to a waiting-room, and later was brought to the hospital."

When seen in the Front Surgery she was in the following condition: She was quite comatose, the pulse full, regular, and not rapid; eyes prominent, pupils contracted, and conjunctival reflex entirely lost. The right arm and both legs were rigid. She occasionally twitched the fingers of the right hand, and sometimes moved the right hand up to her head. Bronzing of the face, hands and arms was noticed.

It was thought probable that she was in a condition of coma following an epileptic fit, and she was allowed to remain on the sofa for two hours. At the end of this time she showed no signs of coming round, and the pulse was becoming more rapid and feeble, so patient was taken into Miriam.

In the ward, pulse was 150 and irregular, respiration stertorous, heart-sounds normal, lips and face cyanosed, pupils equal, contracted and insensitive to light, no conjunctival reflex, head turned to right, both legs and both arms somewhat rigid.

Dr. Washbourn saw patient, and thought her condition was probably due to cerebral hæmorrhage, but suggested the possibility of poisoning, and advised that she should be washed out with the stomach tube. Before this could be done patient died suddenly. Pulse and respiration ceased simultaneously.

Autopsy. — *Lungs.* — Healed phthisis and pleuritic adhesions at both apices; some calcareous bronchial glands.

Heart.—Normal; some atheroma of the aorta.

Liver.—Firmly adherent to diaphragm by old capsulitis; some calcareous glands in portal fissure and retro-peritoneal tissue.

Spleen.—Some capsulitis.

Kidneys.—Slightly granular.

Supra-renals.—Caseous and calcareous throughout.

Brain.—There was a large hæmorrhage into the pons, entirely disorganising it.

Besides the pigmentation previously noted, there was marked pigmentation of the nipples and thighs.

Papers by Guy's Men.

Deciduoma Malignum. By Peter Horrocks, M.D.—*British Medical Journal*, 5th October.

Ovarian Pregnancy. By Hastings Gilford, F.R.C.S.—*Ibid.*

An interesting Case of Compression. By Captain Eugene J. O'Meara, I.M.S.—*The Lancet*, 5th October.

A Case of Acute Double Pneumonia treated with Oxygen. Recovery. By G. E. Richmond, B.A., B.Sc., M.B., B.S. Lond.—*Ibid.*, 28th September.

A Dilated Superficial Abdominal Vein with a suggestive History. By Theodore Fisher, M.D., M.R.C.P. Lond.—*Ibid.*

The Tuberculin Test in Cattle. By G. S. Pollard, L.R.C.P., M.R.C.S.—*Bristol Medico-Chirurgical Journal* for September.

A Case of Acute Double Intussusception in a female infant nine months old. Operation twenty-four hours after onset of symptoms; Rapid recovery. Remarks. Under the care of Mr. Thomas Bryant.—*Lancet*, 12th October.

Experimental Glycosuria. By F. W. Pavy, M.D., F.R.S.—*British Medical Journal*, 12th October.

Was Luigi Cornaro right? By E. H. van Someren, M.R.C.S.—*Ibid.*

Passim.

Sir Joseph Dimsdale, M.P., Lord Mayor Elect, has promised to preside at a Mansion House meeting to be held in January next in furtherance of the appeal of the Hospital for a renewal of public support. The full text of the Appeal will probably be issued immediately after the General Court of Governors called for the 8th proximo.

As we have already intimated there is to be a revival of that once popular institution—the Residents' Dance — which has unfortunately been allowed to lapse. It will be held this year on Tuesday, December 3rd, and every effort will be made to make it a success. Some men may be misled by the title to think that the dance is intended solely for Residents and Senior men, but we wish it to be understood that all Guy's men and their friends will be welcome subscribers. It is particularly to be hoped that the efforts of the committee may be ably seconded in re-establishing this time-honoured custom.

It is with much regret that we read the latest order of the Medical Council, with regard to referred candidates in medicine being enforced to accompany the physicans in the Clinical wards. It is difficult to see the reason for so sweeping an innovation, seeing that the number of failures in medicine is much smaller than in the other subjects of the Final. Presumably the motive of this order is to benefit the referred student, unless, of course, it is intended to be the edge of the wedge to prise open the hitherto sacred portals of Clinical.

Taking it for granted that the interests of the referred candidate have been considered, it is a very doubtful benefit that has been conferred upon him. In the first place, the cases that he will see there are entirely unlike any met with at the Examination Hall, consisting, as they do, for the most part, of acute cases that have been taken in solely with a view to treatment, many of them being for immediate operation, and so being unavailable for further examination except by those directly interested in the treatment of the case. Treatment has hitherto been the prominent point dwelt upon in the teaching in Clinical, the physician, taking for granted that the listeners have a sound knowledge of physical signs, whereas it is a well-known fact that the latter is a great stumbling block at the colleges. The cases of greatest value to a man up for the final, such as chronic cardiac and lung diseases, and the much-dreaded nervous conditions, are all conspicuous by their absence in Clinical.

This order is a two-edged sword, and if possible, cuts the Clinical deeper than his enforced visitor. The value of the training of men in this ward for after work as residents and practitioners has made this appointment so sought after, and has been one of the great advantages which we possess over other hospitals. As soon as the physician adapts his teaching to the requirements of the new comers, as he must if the new arrangement is anyway to better the latter, the value of Clinical as a great training ground is at once diminished. If the ward was thrown open to everyone it would no doubt fill for a time as a novelty, but we think that very soon junior men would find that it would not be to their best interest to frequent it. Looking at the subject from any point of view there is everything to be lost and little or nothing to be gained by the innovation.

This evening (Saturday), the Debating Society opens its winter session, Dr. Pavy, who has always been such a hearty supporter of the Society, will again occupy the chair. The choice of a subject for debate is always a delicate matter, a course between two extremes has to be steered, in order to select a topic that will produce a spirited discussion, free from all ill-feeling; for if the subject has little or no personal interest to men the result will be as dull as ditch-water, and, on the other hand, it does not do to fix on a motion which may prove an open sore for some men. The question to be threshed out would seem to hit off the golden mean, and with Mr. P. Bolus taking up the cudgels against Mr. Hollist, there is every promise of a capital evening.

Football is now in full swing at Guy's, and our teams have delighted everybody here by making a really auspicious opening of the season. A new departure has been made this year by billing our fixtures at the suburban stations, and not merely round the immediate vicinity of the ground. This action has been justified, as the gate at the Catford Bridge match was quite good, fully 700 being present. If the spectators can be treated to such good football as we have had lately, the funds of the club should be considerably augmented by gate money.

The First XV. had a good margin on the right side against Lennox, winning by eighteen points to nil. Our forwards, although putting in some good individual work, did not get well together, and were slow in heeling out. They seem to need a big stimulus before settling down in hard earnest to the game. Last Saturday, Catford Bridge were easily defeated by twenty points to three. Although the forwards made a better display, they had the same fault —a bad commencement, enabling the visitors to press us much more than they should. This is possibly due to the several alterations that have had to be made in the pack, and to poor condition, but it is the most noticeable fault in the team and must be remedied. The outsides were excellent in both games. In the Catford match Alcock was given a place, and beside being a good player has a lot of weight and runs well. We have five excellent three-quarters, and it will be a thankless task to choose the line. The Second XV. have started well, but judging from the number of scratchings, the interest taken in the team does not appear to be of the best.

Although Guy's met with defeat against Cambridge, the margin was very small and the game was even closer than the score of two tries to one represents. The forwards, strengthened by Trail and Wall, rose to the occasion and played a really sound and hard game. The outsides were in good form, but with any luck might have added to the score. We were most unfortunate in losing Cutler just before half-time, and consequently were one short in the scrum for the remainder of the game. A drop by Payne was very close, and a kick from a penalty only just fell short. It was a most creditable display on our part, and even though we were one short in the second half, it is not too much to say that we were unfortunate in at least not making a drawn game of it.

The Association team also made a good start by easily defeating the Old Harrovians and the Idlers, but the form shown by us was not good. This is partially attributable to the weakness of our opponents. Denning, at half, seems to be the strongest of the new men in the defence. Wragg, on the outside right, played a good game against the Idlers. Litchfield, in the centre, is good at times, and passes well, but is not vigorous enough. The 2nd XI., in their first match, got through the first round of the Surrey Junior Cup, defeating the Borough Polytechnic 2nd XI. by three goals to two. Considering that it was a scratch team, they should make a strong side this year. On Saturday next the 1st XI. play West Norwood in the first round of the Surrey Cup, and it is hoped that a good crowd of our men will turn up to cheer our side on to victory.

Two lectures will be given in the Court Room on November 5th and 19th, at 4 o'clock, by the Rev. P. N. Waggett, S.S.J.E., on "Science and Religion."

At the last meeting of the Gazette Committee the nature of the Christmas picture was decided on. The annual plate will be a drawing of that picturesque old inn, the "George Hotel," which is one of the few quaint and historic buildings "still standing with a kind of gloomy sturdiness" left to us by the hygienic improvements everywhere being made by the County Council. At the time Dickens wrote his novels the Borough was particularly rich in such old hostelries, which he described as "great, rambling, queer old places, with galleries, and passages and staircases wide enough and antiquated enough to furnish materials for a hundred ghost stories."

One of the London Boroughs has suddenly awakened with a start to realise that the infant mortality within its area is excessive, and steps have been taken for supplying the mothers with sterilized milk at cost price. The idea having been adopted, it would seem to be only a question of time before we have other Councils, alarmed at the obesity or otherwise of its population, providing "anti-adipose aliment for the fat" and "emulsion for the emaciated," and it only needs a slight extension of the same idea to arrive at a copious supply of beer for the bibulous.

In the near future an important sporting event will take place, the six doughty clinicals having challenged any six of the residents to play them at "squash." The match should be productive of some keen play and good fun. The popularity of the game (especially amongst men whose work necessitates their being constantly in the hospital) has increased so rapidly of late as to almost outgrow the capacity of our one court.

Messrs. J. M. Brydone and G. Lewin are to be the new resident obstetrics. We would warmly congratulate them on their appointment.

Pass List.

University of Cambridge. October, 1901.

EXAMINATION FOR THE DIPLOMA OF PUBLIC HEALTH.

K. W. Goadby, H. J. Starling, D. P. Watson.

SCHOOL EXAMINATION IN ELEMENTARY ANATOMY, OCTOBER, 1901.

V. A. P. Costobadie, S. K. Poole.

Papers by Guy's Men.

A Case of Laparotomy for Multiple Septic Abscesses and Intestinal Adhesions possibly due to Salpingitis, causing Obstruction, followed by a second operation for Acute Obstruction, due to a Band and Volvulus. Recovery. By A. Ernest Maylard, M.B., B.S. Lond.—*Ibid.*

A Case of Tetanus. Use of Anti-tetanic Serum. Death. By T. Graham Scott, L.R.C.P. Lond., M.R.C.S. —*Ibid*, 19th October.

The Treatment (Non-operative and Operative) of Congenital Dislocation of the Hip. By F. F. Burghard, M.S., F.R.C.S.—*Ibid*, 19th October.

Correspondence.

To the Editor of Guy's Hospital Gazette.

Chess Club.

Dear Sir,—With the advent of the Winter Session I should like to call the attention of men, of freshmen especially, to the Chess Club.

We only came into existence as recently as 1899, and as yet are, comparatively speaking, in our infancy. Nevertheless, in 1900 we managed to tie with three other teams for the Inter-Hospital Challenge Shield. This year, however, we were bracketed second with Middlesex in the competition.

From October to March weekly meetings are held from 7.45 to 10.30 p.m. in the club smoking-room. On these occasions opportunities are afforded for the learning of chess. Ordinary and consultation games are played, the object of the latter being to allow the novice to gain an insight into the wiles and devices of a more experienced player. But although the teaching of beginners is one and perhaps not the least important function of these meetings, the ultimate object is to train a team of six men worthy to uphold the honour of this hospital in the Inter-Hospital Chess Tournament.

As the club does not belong to the Union, an annual subscription of half-a-crown is necessary. Notices of the Annual General Meeting will be posted in the Colonnade. New men are invited to attend.—Yours faithfully,

E. H. B. MILSOM, Hon. Sec.

Residents' Dance.

Dear Sir,—We wish to make it known, through the Gazette, that there will be a Residents' Dance on Tuesday, December 3rd, in the Court Room. Tickets, Gentlemen's 10s., Lady's 6s., may be obtained from the Committee:—F. G. Cross, F. G. Gibson, T. P. Thomas, H. Wacher, and, yours truly,

H. S. FRENCH,
President of the Residents.

The "Artists."

Dear Sir,—It is desirable, in view of the fact that No. 2 Section of G Company, Artists' Rifle Volunteers, almost exclusively consists of Guy's men, that this section at least should be kept up to full strength. If more than one section could be recruited, it would be more in keeping with the traditions of the Hospital, which at one time had its own armoury, drills being held in the grounds. It would surely not be too much to expect that out of 600 men more than one section could be raised. Any men who care to join are requested

to read the notice posted in the Colonnade, and to give their names in to R. Felton, J. Pollard, or any other member of the Corps, in order that a meeting may be convened to discuss the feasibility of this project. Sergt. Robinson of G Company, and possibly other representatives of the Corps, will be glad to be present, but it is desired to ensure a good attendance before putting these gentlemen to this trouble. It is especially easy for freshmen, whether in the dissecting-room or in preliminary classes, to complete their recruit drills within reasonable time.—I am, Sir, yours truly,

R. FELTON.

Middlesex Imperial Yeomanry.

To the Secretary—

Sir,—It has occurred to me that many students at your hospital may like to join the Middlesex Imperial Yeomanry. The regiment is formed for home defence, and offers to those who are fond of riding and shooting an opportunity of practising those accomplishments at a very trifling cost, and at the same time qualifying themselves to take an intelligent part in the defence of the country, should the unfortunate necessity arise. All the drills take place in the evening, or on Saturday afternoons, so that the day's work of the members is not interrupted. I shall esteem it a favour if the Governors of your hospital will permit me to forward, for distribution amongst the students, some copies of the enclosed circular, and thereby help forward the effort of the Government to raise in this country a force of 35,000 Yeomanry.

Trusting that I may be favoured by the assistance of your Board.—I am, dear Sir, yours faithfully,

W. H. MULLENS,
Captain Commanding C Squadron, M.I.Y.

C Squadron Headquarters, M.I.Y.,
14, Holborn Viaduct, E.C.

A Protest.

Sir,—As one of the many but dauntless "rejected," I must protest against the recently-issued proclamation that referred men must in future go round with the physician in Clinical.

Of course, it is patent to everyone that the clinical is a man of supreme importance (in his own estimation), who has been accustomed to regard the Clinical wards as his own special dominion to the exclusion of all less fortunate individuals; whereas he really exists to take in cases the H. P. doesn't want, and occasionally (if qualified) to give anæsthetics. We all know the lordly air with which the clinical for the week comes over to the front surgery, and having gone over a case tries to get the Surgical ward clerk's opinion on it. No doubt, the time to teach the clinical his proper place and rights has come, but why use us poor, referred ones as the means to this end? What with test exams. and revision classes our burden is already too heavy.

I remember, one day, when going round the Medical wards, the physician was called over to see a case in Clinical. What a thrill of expectation ran through the "firm" at a thought of a peep into the sacred and mysterious clinical! What visions of weird cases abounding in interest arose! But what was the realisation? A ward chiefly filled with "interesting abdominal conditions," for the most part already operated upon, a few heart cases "sitting up and panting," far too ill for unnecessary examination, add to this a few typhoids and pneumonias, and you have it. One longed to get back again to the general wards where there were hearts that could be listened to, abdominal tumours to be felt, and nervous cases to be gone over.

A learned discourse on the properties of cacodylate of soda may be full of interest, but I went to hear about the more homely cirrhotic liver and its symptoms. "Belladonna for babies" has only a passing interest for me, while I have yet to learn the signs of the more familiar dilated stomach.

No doubt I ought to be deeply grateful for this grand opportunity for clinical teaching. Had it been given with the "option of a fine" in the way of a choice between the general wards or Clinical, it would have been a different matter, but as it now stands with no loophole of escape, I can only protest for the re-establishment of the old order of things, or at least a modification of the new.—Yours sincerely,

PINK PAPER.

Guy's Hospital Hockey Club.

Dear Sir,—At a general meeting of the above club, held on Monday, the 14th inst., Mr. R. Moyle in the chair, the following officers were elected:—President: F. J. Steward, M.S.; Vice-President: J. Fawcett, M.D.; Captain: F. Morres; Vice-Captain: A. Morris; Secretary: H. H. Moyle; Committee: A. D. Gater, O. B. Travers, M. Leckie, H. M. Langdale, L. G. Davies. A "Ground" Committee, consisting of two members of the regular committee and one from the general assembly, was also elected, viz., A. D. Gater, M. Leckie, and G. T. Hardy. The duty of this committee is simply to enquire after, and endeavour to obtain a ground as speedily as possible. It was decided that the colours should consist of a blue flannel shirt, with orange collar, cuffs, and button flap. These may be obtained of Geo. Lewin, Crooked Lane, price 7s. 6d. each. It was also resolved that, in the event of a ground being obtained, the Clubs' Union Committee should be asked to incorporate the Hockey Club as a recognised institution of the Union, and also to allot a Blue or Half-Blue. It was fully recognised, however, that these measures could scarcely be carried out until a ground was obtained, and, therefore, it is the duty of all members, who have the interests of the club at heart, to do their utmost to help the

Committee in acquiring a ground. A number of men have put their names down as wishing to play, and in time we ought to be able to run two teams, but to do that we must be able to arrange home matches. Therefore, I hope that before long, we shall have a ground of our own, and that the men who are now playing for outside clubs will be playing for Guy's regularly, in which case we should have a team quite strong enough to win the Inter-hospital trophy. But we can't expect these men to give up their clubs and play for us until things are more settled, and, therefore, I appeal to all men, members and otherwise, who can help us in any way by giving information to acquire a ground, to do so immediately.—Yours truly,

F. MORRES.

As seen through Clouds.

In October, the humdrum existence of the long vacation at Guy's is swept away and the stream of hospital life is once more raised to its height by a freshet. As an old, worn and battered log that has been carried along by this stream, past the rapids of many an exam. and other crises, sometimes halting for a while with other poor unfortunates in a log-jam above one of the obstacles, at others swept along in spite of oneself, I have at last passed the Great Cataract of the Final and rest in a calm eddy before entering the sea of general practice.

With this comes a contemplative mood and in a retired corner of the smoke-room I sit, and through the thick curling clouds, hear the babble of the stream on which we all float and watch the hurrying, jostling mortals whose object it is to reach its termination. A panorama extending over years slowly unwinds itself before me, and with a mind eased for the time of cares, and soothed by the Indian weed I look on with a mild interest. I see many tributaries running into the big stream, First Year, and down them I note the newly launched logs floating into the Pool of Entrance Day. Some are chips of a good old medical stock bent on a worthy race in hospital life and its attendant sports, some wholly on the latter. I see also branches of a big sporting tree and off-shoots who will never reach the size attained by their sires. On a murky sluggish tributary are nondescripts who have been sent on their way because nothing better could be devised for them.

It is the first day of the year and all the logs lie jumbled together, the ruddy athletic variety cheek by jowl with the already care-worn bookworm. The Lumberman with a long pole gives each a start and they are off altogether but in a very short time some show to the front.

As in all other rivers there are backwaters, and many float idly in. Of these some are once more sent forward by a vigorous application of the long pole from the Medical Office, but a few remain until their progenitors, acting on the advice of the Lumberman, remove them and give them a trial in other waters. Some are launched afresh amidst the fierce whirl of the Stock Exchange stream, others find a rest in that calm haven for the weary—the brewery, and a few are despatched to that vague destination, the colonies, with a still more vague idea of what is to become of them unless they seek the refuge for destitute gentlemen—the mounted police.

Once more are our wayfarers flung together in the fierce turmoil of the hospital cup-ties, and Guy's emerging victorious, proceed cheerfully again.

At the end of the session the water becomes stirred and the rapids of the First Conjoint are upon them. Some float gaily through, but many are tightly jammed together above. The Lumberman's pole is once more requisitioned, and with a little easing of the way a proportion follow, but the attempts of others, and of those who guide them are frustrated time and again. The shallows of the long vacation are before the fortunate and they bask idly in the sun of success.

The second year is like unto the first, but at the end of it they arrive in the more serious vista of ward work and are banded together, like rafts, into a firm, and to a large extent sink or swim together. There are some, of course, who meet with ill luck and remain at anchor till another list gives them their sailing orders.

The Great Cataract of the final is a fearsome thing, but encouraged by former successes there are few who give it up in despair.

They now reach the great Whirlpool of Chance, and emerging from which they form one of the great props of our hospital—the residents, and fatten and expand at a board peculiar to themselves. Some few take root, and after languishing in the comparative obscurity of the Borough are transplanted to the Elysian fields of the West, where they flourish like a green bay tree, an ornament to the hospital and a credit to themselves.

The less fortunate find a poorer soil in the country and grow into trees of a more modest size, but are looked up to as worthy branches of one great stock.

Of the crowd I saw at the start from the Pool of Entrance Day, some have not arrived at the finish. They have either been removed, vanished away no one knows where, or perchance have sunk water-logged.

Of those that have run the race, some have been roughly battered against the rocks, but must have had their rude corners rubbed off by jostling with others, and are to a more or less extent rounded and polished like pebbles on the beach.

My pipe goes out, I see many floating into the quiet eddy that I have already reached, so I must bestir me else they get to sea first and reach a haven I should prefer for myself.

D.

NOTICE TO CORRESPONDENTS.

The Editor wishes it to be understood that no communications can be inserted which are not guaranteed by the name of the sender. All articles must be written on one side of the paper only.

In Lighter Vein.

SCENE—Out-patients.

Patient is a middle-aged dyspetic and neurotic female, with an alcoholic voice; owns that her grandfather had a cough, and several of her relations have suffered from spasms.

MONDAY—Medical Out-patients.

Eminent Physician (having written out her history, &c., and having examined her for three-quarters of an hour): "Now, of course, we must consider the possibilities" (gives a resumé of "Taylor's Medicine") "and eliminate certain things" (proceeds to eliminate everything except *wind*). "Mist Armoraciæ Co., is indicated, I think." And gives the patient a card for Eyes.

TUESDAY.

Eye Specialist: "I find some minute changes in the disce, which may mean something, and, on the other hand, may mean nothing. There is some increase of tension, but in which eye I really can't say. Her abdominal condition is apparently her chief trouble." (Gives patient card for Surgical Out-patients.)

WEDNESDAY.

"Law bless your dear heart; that's all right. Why the dear thing's got the wind, bless her. That's all right, my dear. You come up to-morrow and see the ladies' doctor." (Patient thinks him *such* a nice man.)

THURSDAY.

Eminent Gynæcologist (Talking softly to himself): "It seems to me that her throat is the chief trouble." (To patient): "I think you ought to have your throat seen to. Of course, we don't attend throats here, but if you come up to-morrow, &c." (Patient given a card for Throat Out-patients.)

FRIDAY.

Very eminent throat specialist: "Mouth a little wider open, please." (Smacks his lips.) "All right, all right; I shan't hurt you." (Proceeds to remove tonsils and adenoids. Patient is dazed and too astonished even to scream.) "There, quite painless, you see; very remack—; quite an interesting case. Now we'll just attend to her nasal trouble." (Removes her left turbinal. Patient protests that it is the right side that troubles her.) "Ah, yes; of course, of course." (Removes right turbinal.)

Patient (who is now gasping): "Is there anything else?"

E.T.S.: "Only just one minute more, madam." (Extracts tooth and taps antrum. Patient's jaw closes on E.S.'s hand. Scene closes amid cries from patient and counter groans from E.S., who thinks it very remack—, &c., &c.)

THE BIRD OF PREY

Appointments.

MEDICAL SCHOOL APPOINTMENTS.

The following appointments have been made by the Medical Council and approved by the House Committee:—

Clinical Assistants in the Medical Wards.—Messrs. G. B. Churchill (Dr. Taylor); A. H. E. Wall (Dr. Hale White); G. F. Humphreys (Dr. Pitt); F. L. Thomas (Dr. Perry).

Ophthalmic Dressers.—Messrs. A. W. Gater, H. Barber (Mr. Higgens, November 1st); E. H. Griffin (Mr. Brailey, November 1st); W. A. G. Stevens (Mr. Higgens, December 16th); D. R. T. Griffiths (Mr. Brailey, December 16th).

Surgeons' Dressers.—Messrs. A. P. Piggot, J. Braithwaite, H. S. Jones, J. Bickerton, J. H. Donnell, C. F. Fraser (Mr. Howse); J. B. Copland, W. F. Box, P. C. V. Bent, L. S. H. Glanville, E. G. Goldie, W. W. Read (Mr. Golding-Bird); K. Anderson, C. H. Robertson, E. W. Strange, B. Glendining, B. H. Wedd, H. S. Brown (Mr. Lucas); S. L. Pallant, P. W. Hamond, H. M. Goldstein, F. W. Fawssett, R. G. Anderson, W. L. M. Day (Mr. Jacobson).

Dental Surgeons' Dressers.—Messrs. R. C. Lawry (November-December); J. Evans (December-January); H. J. Gater (January-February).

Externs.—Messrs. O. W. Richards, E. Faulks, H. T. Palmer, J. C. O. Bradbury, A. W. Iredell, C. J. Pinching (November); W. H. Cole, H. Tipping, W. Tuohy, W. C. Lewis, M. C. Wetherell, J. D. Pearson (December); C. E. Bartlett, C. H. Denyer, H. L. Shelton, C. M. Murray, F. C. Knight, F. M. V. Smith (January).

Notices.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

Notice is hereby given that the next primary and Final Examinations for the Diploma of Fellow will commence on Thursday, November 7th, and Monday, November 25th, 1901.

Candidates are required to give not less than fourteen days' notice of their desire to present themselves for either of these examinations.

Particulars relating to these examinations may be obtained of the Secretary (Mr. F. G. Hallett), Examination Hall, Victoria Embankment, London, W.C., to

whom all applications in reference to examinations should be addressed.

The required fees must be paid three days prior to the examinations.

September 30th, 1901.

LICENCE IN DENTAL SURGERY.

Old Regulations.

Notice is hereby given that the next examination will commence on Friday, November 8th, 1901.

New Regulations.

Notice is hereby given that the First and Second Professional examinations will commence on Friday, November 8th, 1901.

Candidates are required to give not less than twenty-one clear days' notice in writing of their desire to present themselves for either of these examinations to the Secretary (Mr. F. G. Hallett), Examination Hall, Victoria Embankment, W.C., from whom all particulars relating thereto may be obtained.

September 30th, 1901.

Sport.

Rugby Football.

GUY'S v. LENNOX.

Played at Honor Oak Park on Saturday, October 12th. We had little difficulty in beating Lennox. This was principally brought about by the brilliant play of our three-quarters. Starting from the entrance end of the ground we soon got the upper hand, and Lennox, whose defence was weak, had all their work cut out to prevent us from scoring. Scarcely seven minutes had elapsed from the start when Morgan scored our first try, and himself landed a neat goal. On resuming, the Lennox forwards put in some useful work, and a good kick by Knox brought the ball into our twenty-five, but a mark by Orpen relieved. Shortly afterwards, offside was given against us, and Harrison had to touch down in defence. We continued to have the best of matters, and another try was obtained by Payne, Morgan converting. Half-time—Guy's, 10 points; Lennox, nil.

After the kick-off, Lennox got within a few yards of our touch line, but were gradually forced back, and Orpen added another try, but O'Brien failed to convert. A few minutes after, Morgan made a splendid drop, which looked very much like a goal, and forced our opponents to touch down. Within a minute of time Morgan again crossed the line, and the try was converted by O'Brien, leaving us winners by 3 goals and 1 try (18 points) to nil. Team:—

Guy's.—E. M. Harrison (back); E. Morgan L. T. J. Orpen, A. B. O'Brien, P. F. McEvedy (three-quarter backs); O. V. Payne, W. G. Louisson (half-backs); H. A. Cutler (captain), R. C. Lawry, A. R. Thompson, B. Glendining, E. H. B. Milsom, E. L. Ward, T. B. Layton, J. W. Featherstone (forwards).

Remarks.—Harrison at back was very sound, but might utilise the touch line more than he does. Both wings three-quarters were in good form, Morgan being particularly good, but McEvedy was much hampered by the unfair tactics of the opposing wing three-quarter. We notice with considerable regret an increasing tendency, both on the part of the centre three-quarters and the half-backs, to run across the ground before passing, thereby considerably handicapping the wing three-quarters, who are, of necessity, driven to touch. The forwards were opposed to a much heavier pack, and during the first half were beaten in the scrum, but they lasted better than their opponents and towards the finish were having the best of matters. The heeling is still far from good, and from the funereal manner in which the ball occasionally comes away from the scrum, several of the forwards must at times altogether forget the existence of it, and also of the fact that they have a set of good scoring backs behind them.

GUY'S v. CAMBRIDGE UNIVERSITY.

On October 16th the fifteen journeyed to Cambridge to play the annual match against the 'Varsity, which resulted in a win for the latter by 2 tries to 1, after an even and exciting game. The hospital kicked off, and for a time play ruled fairly even, both twenty-fives being visited alternately, then an attempt to set our three-quarters going in their own twenty-five was unfortunate, the ball being kicked to the opposing three-quarters, who scored far out by means of Hearfield. The place kick was unsuccessful. Soon after, O'Brien and Orpen carried the ball close to the Cambridge line by a good passing run, and the latter passed in to Cutler, who unfortunately slipped and injured his leg, thus spoiling what appeared to be a certain try. Half-time was called with the score 1 try to nil.

Soon after restarting, good play by the hospital three-quarters enabled O'Brien to score far out, but the try was not improved on. During the second half the hospital halves got the ball out well to the three-quarters, who several times looked like scoring, but the defence of the Cambridge full back was very sound. Shortly before time a grand rush by the Cambridge forwards ended in Gilman scoring a try, which was not converted, and the game ended as above stated.

The result was somewhat disappointing as we had at least as much of the play as our opponents. The outsides were brilliant at times, but lacked scoring power. The forwards did well against the heavy Cambridge pack, especially as Cutler was injured in the first half. Trail in particular played a splendid game. Team:—

Guy's.—E. M. Harrison (back); E. Morgan, L. J. J. Orpen, A. O'Brien, P. F. McEvedy (three-quarter backs); O. V. Payne, M. G. Louisson (half-backs); H. A. Cutler, M. C. Wetherell, D. H. Trail, A. H. E. Wall, R. C. Lawry, A. R. Thompson, E. H. B. Milsom and B. Glendining (forwards).

GUY'S v. CATFORD.

Played at Honor Oak Park, on Saturday, October 19th, before a good gate of quite 700. Catford kicked-off at 3.25, defending the far goal. Payne returned well, but Catford were very vigorous at the commencement, and worked back to our twenty-five, where Anderson was conspicuous on two occasions. Catford continued to press, and Glendining was compelled to touch down, but Catford were not to be denied, and shortly after scored in the right-hand corner, the try not being converted. Catford pressed again on re-starting, but Wetherell relieved well, and our three-quarters took the ball up the field, when, owing to a mistake by their full-back, McEvedy had a certain chance of scoring, but unfortunately slipped in gathering up the ball. From this time we began to press, and Orpen scored after a clever run through the midst of his opponents, O'Brien with a splendid shot nearly converting. On resuming, a free kick was given against us, and Catford got back to our twenty-five, but did not look dangerous, although there were several instances of faulty tackling by our backs. It now came on to pour in torrents for about ten minutes, during which we worked our way up the field, and finally Alcock scored a good try in the corner, handing off two opponents beautifully. O'Brien's attempt at goal was an excellent one. Catford now played up better, and we were forced to touch down, but O'Brien got well away, and they in turn were compelled to touch down. For the remainder of the first half we had distinctly the best of it. Half-time :—Guy's, 2 tries ; Catford, 1 try.

On resuming, our forwards rushed the ball down the field, and Catford had to kick dead to prevent Orpen from scoring. Shortly after, following an excellent tackle by Wetherell, Anderson dribbled well down the field, enabling Alcock to score a try, which O'Brien failed to convert. Almost immediately after this some good work by Thomas, O'Brien and Orpen enabled the latter to score another unconverted try. Our men were now playing splendidly, the wet ball seeming to make no difference at all, and McEvedy soon added another try. We pressed continuously after this, Alcock being conspicuous by his strong running, and within four minutes of time McEvedy scored another good try, which O'Brien converted, leaving us winners, after a fast and interesting game, by 1 goal and 5 tries (20 pts.) to 1 try (3 pts.). Team :—

Guy's.—E. H. Harrison (back) : — Alcock, L. J. J. Orpen, A. B. O'Brien, P. F. McEvedy (three-quarter-backs) ; O. V. Payne and W. G. Louisson (half-backs) ; R. C. Lawry, J. P. Thomas, A. R. Thompson, B. Glendining, R. G. Anderson, E. H. B. Milsom, E. L. Ward and J. B. Layton (forwards).

Remarks.—In this game the forwards showed great improvement on some of their previous displays, but, as in previous years, the team begins very slowly, and it is not until about half-time that they get together. There was one great fault on Saturday, which was very noticeable all through the game ; that is, they were slow in coming round to form a scrum when the backs were tackled, also in coming up to the line-out. The dribbling and heeling-out in the second half was very good, and when Cutler is well they ought to be a very useful pack. The half-backs played an excellent game, giving their backs plenty of chances, which they were not slow to take advantage of. Wetherell played one of the best games since he came up here. There is little to be said of the three-quarters, except that they all played well. Alcock, who played for the first time, showed us that he was a first-class player. He is a very strong runner, and kicks a good length. We do not envy the Committee the work they have to do to select a three-quarter line. Harrison kicked well and was as safe as usual.

GUY'S "A" XV. v. LENNOX "A."

Played at Stamford Bridge on October 12th. Guy's had a weak team, and if it had not been for the sportsmanship of some of the old players, would have been very short.

Having lost the toss, Guy's defended the west goal. Play was very keen and fast, and though there were some good runs on each side, neither side could score up to half-time.

Crossing over, Guy's had to play without the services of Davies-Colley, who twisted his knee. Towards the end of the game, Cutler almost got in for Guy's, being collared on the line. Result, no score. Team :—

Guy's.—R. D. Bridger (back) ; F. Alcock, F. E. Walker, E. N. Jupp, W. H. S. Burney (three-quarter-backs) ; F. Cutler, A. E. Kynaston (half-backs) ; R. Griffiths, H. Watts, R. M. Rendall, H. Davies-Colley, A. R. Beaumont, R. A. Scott, R. O. Williams, H. S. Brown (forwards).

Referee, Mr. H. J. Owen. Touch Judge, Mr. A. L. Moon.

Remarks.—Bridger, at back, played a very good game, considering it was his first appearance for over a year. Walker and Alcock, at three-quarter, were the best on the side, kicking and saving in good style. The other three-quarters and halves also played a hard game, Cutler saving well. The forwards did not combine at all well and were opposed to much heavier men, and when they did obtain the ball, heeled out at the sides. Scott made a very good impression with his play in the loose.

GUY'S "A" XV. v. OLD CHARLTONIANS.

Played at Charlton, October 19th. Guy's again had a weak team, and were one short in this match. Winning the toss, we played downhill in the first half, having wind and sun in our favour. Within the first ten minutes, Hicks, after a run right across the field, scored, and Tolhurst followed suit shortly after. Both kicks at goal failed. One of the opposing centre three-quarters gathered the ball from a loose scrum in our twenty-five, and obtained a try, which was not converted, registering the first points against us this season.

In the second half there was a heavy shower, which made the ball difficult to handle. Trubshaw scored an excellent try after a dribble, and just failed to convert it

himself. Result: Guy's, 3 tries; Old Charltonians, 1 try. Team:—

Guy's.—E. N. Jupp (back); J. T. Hicks, A. E. Kynaston, C. D. Pye-Smith, H. S. Brown (three-quarter-backs); M. S. Louisson, F. Cutler (half-backs); K. N. Trubshaw, H. Watts, J. W. Featherstone, A. M. Tolhurst, R. A. Scott, G. F. Humphries, H. Wight (forwards).

Remarks.—The game was not a very good one, the play being too scrambling and there being too many free kicks. Guy's threw away two or three good chances of scoring, but the team played as well as expected.

FOURTH FIFTEEN.

List of Fixtures.*

Date.		Name.	For.		Against.	
			Goals.	Tries.	Goals.	Tries.
1901.						
Oct.	5.	Wasps IV. Lost. ...	0	0	1	2
	12.	Blackheath B. Scratched.				
	19.	Streatham III. Won. ...	1	1	0	1
	26.	Court Hill A.				
Nov.	16.	Leytonstone B.				
	23.	Dulwich College III.				
Dec.	7.	Catford III.				
1902.						
Jan.	18.	Court Hill A.				
	25.	Wasps IV.				
Feb.	12.	Dulwich College III.				
	22.	Catford III.				
Mar.	1.	Blackheath B.				
	15.	Streatham III.				

* All Matches are played away.

Association Football.

GUY'S v. OLD HARROVIANS.

This, the first match of the season, was played at Honor Oak Park on Saturday, October 12th, Guy's winning by 3 goals to nil. Neither team was at full strength and the game was of somewhat a straggling nature. In the first half Chignell scored with a good shot, and two more goals were added in the second half by Wilson and Norton.

The backs played a safe game while Denning and Pedrick at half showed good form, but the forwards were not good and lacked passing. Team:—

Guy's.—E. A. Collins (goal); A. D. Crofts, A. H. Wilson (backs); A. F. Denning, P. Pedrick, E. N. Plummer (halves); G. B. Harland, T. A. Chignell, P. C. Litchfield, E. L. Norton, T. F. Wilson (forwards).

GUY'S v. IDLERS.

This match was played at Honor Oak Park on October 19th, and resulted in a win for Guy's by 5—0. We were short of Barber and Goss, trials being given to E. Wragg and E. M. Plummer.

The Idlers kicked off and play was principally in their half of the ground, but was very ragged. After about a quarter of an hour we forced a corner which was well taken by Denning, Lichfield heading a very nice goal. Play now improved slightly, our halves and backs being particularly good. Norton and Wilson worked the ball up well several times, and from one of the latter's centres Chignell scored close in. A deluge of rain coming on rendered good play impossible, and nothing more was scored before half-time.

In the second half, play was almost entirely confined to the visitors' half of the ground, Collins only having to save once, from a long shoot. After the game had been restarted about ten minutes, Wragg got away on the right, and, centring well, Norton scored a third goal. The game continued very uneventfully till within about ten minutes of time, when Guy's woke up again. Lichfield, receiving a pass close in, scored easily, and the last goal came from Wragg. This was the best of the match, as he beat his half and both backs, and scored with a very nice shot. Time was shortly after called, leaving us easy winners of a poor game. Team:—

Guy's.—E. A. Collins (goal); H. B. German, A. R. Wilson (backs); A. F. Denning, J. Cameron, E. M. Plummer (half-backs); E. Wragg, T. A. Chignell, P. C. Lichfield, E. L. Norton, T. F. Wilson (forwards). W. O. Roberts, referee.

Remarks.—Our defence was very good, and easily held the four forwards opposed to it. Collins had nothing to do. German and A. R. Wilson played very well together, and should prove very strong. The halves were all good, Denning playing remarkably well. The forwards were not at all well together, and combination was markedly absent. Wragg played very well, showing good control of a very slippery ball, at outside right.

GUY'S 2nd XI. v. BORO' POLYTECHNIC 2nd XI.

Surrey Junior Cup.—First Round.

The 2nd XI. opened their season on Saturday, October 12th, at Honor Oak Park, by competing in and getting through the first round of the Surrey Junior Cup.

With only four of last year's team available, it was a matter of speculation as to how the XI. would shape.

Winning the toss, Guy's played with the sun at their back, and for the opening ten minutes the Boro' Polytechnic had more of the game than the home team. Our men lacked that dash looked for in a cup match, and waited for the ball to come to them rather than trying to get to it. However, a pretty bout of passing by the centre-forward and the right wing, ended by the former, Barlow, opening the score of the match and season; but it was not long before our opponents equalised matters from a scrum in front of goal. Play was now rather fast, but scrambly, and each custodian was called upon to save. At length Penford, who had previously hit one of the uprights with a shot, netted the ball and put us ahead. Before half-time was called, each team again beat the goal-keeper, but on each occasion the goal was ruled off-side.

During the second half our men played up in much better style, and Cameron, at centre-half, was frequently

very prominent. The forwards several times got well away, but the opportunities were missed by the men shooting too soon. The Polytechnic forwards then put the score at two all with a shot that hit the corner of the post and rebounded into the net.

The game now became rather exciting, and several fouls were given; but it was not till a quarter of an hour before time that Guy's were once more given the lead by a shot from the outside left. From now till the finish the home team had much the better of the game, but were unable to increase their lead, and the whistle left Guy's the winning team by 3 goals to 2. Team:—

Guy's.—Peatfield (goal); Leaming, Hogarth (backs); Smith, Cameron, Morten (half-backs); Clough Penford, Barlow, Messent, Peall (forwards).

Remarks.—Taking into consideration that this was the first match of the season, and that the men had not played together before, the performance of the team was very creditable. However, there is vast room for improvement in the whole team, and this can only be accomplished by the men turning out regularly and going down to the ground during the week to train. The shooting among the forwards was not good, and the centre and insides must learn that it is no use shooting when twenty-five yards from goal. Cameron at centre-half played a good game during the second-half, but the others must learn to be smarter on the ball, and to feed their forwards. Leaming was good at back. In goal Peatfield stopped one or two good shots, but did not seem to have much idea of "clearing."

GUY'S 2nd XI. v. OLD FORESTERS 2nd XI.

This match, played at Snaresbrook, resulted in a win for the Hospital by 3 goals to 2. The team was weakened by the absence of some of the regular men, but in spite of this fact managed to make a very creditable show. Kicking-off downhill, the forwards got away quickly, but failed to keep on the ball, so that an exhibition of more or less wild kicking filled the first half, in the midst of which both sides managed to score.

On crossing over, and playing uphill, the Hospital team outplayed their opponents, showing better combination and more stamina, and succeeded in getting through twice to the home team's once.

Messent and Martin on the left, and Clough outside right, played noticeable games. Pedrick at centre half was very steady, and should prove a valuable addition to the team. Team:—

Guy's. — Peatfield (goal); Frankenburg, Leeming (backs); Turner, Pedrick, Penford (half-backs); Messent, Martin, Barlow, Reader, Clough (forward).

Hockey.

GUY'S v. ELTHAM II.

This, the first match of the season, took place at Eltham on Saturday, October 19th, and after a good game ended in a draw of 2 goals each. Of the new men who were playing, Mollison at half and Reynolds and Bartle at back, were easily the best. Of the others, Moyle at back and Morris at centre forward, both played well. With more training and more practice the team would have done much better, but seeing that the men had never played together before, and that several were out of practice, we did well not to lose. Team:—

Guy's.—D. Reynolds (goal); H. Moyle, W. Bartle (backs); F. H. Wallace, A. Gater, M. Mollison (half-backs); L. M. Stevenson, O. Brookhouse, A. Morris, F. Morres, O. B. Travers (forwards).

United Hospitals Hare and Hounds.

Runs will take place this year every Saturday with the Blackheath Harriers at Blackheath.

It is hoped that all cross country men, particularly freshmen, will turn out, so that the hospital may be well represented in the Cup Tie.

"Green Man" 3 o'clock. Lewisham Station.

October 18th, 1901. OSWALD S. NORTON.

Review.

The price of books submitted for review should in every case be stated.

Golden Rules of Skin Practice. By David Walsh, M.D. (John Wright & Co.) 1s.

The subject of skin diseases would seem to lend itself particularly to the method adopted in this little series, for it is often sufficient for practice that a man should know the salient points in the diagnosis and treatment of any particular skin disease.

Although this books only contains some hundred small pages, Dr. Walsh has managed to condense a wonderful number of essential rules into them, and anyone who carefully masters it in conjunction with a regular attendance at "skins," ought to have at least a good working basis to practice on.

Births.

HENSON.—On August 31st, at Elmsett Hall, Wedmore, Somerset, the wife of W. J. Henson, of a daughter.

SMITH.—On September 8th, at Cawnpore, N.W.P., India, the wife of Captain H. Austen Smith, I.M.S., of twins—boy and girl.

Death.

SMITH.—On September 23rd, at Cawnpore, N.W.P., India, Charles Augustus Austen, son of Captain and Mrs. H. Austen Smith, I.M.S., aged 16 days.

Ed.—D. G. G.

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Notice.

All Communications, Articles, Letters, Notices, and Books for Review should be forwarded, accompanied by the name of the sender, to the Editor, GUY'S HOSPITAL GAZETTE, *Guy's Hospital, S.E.*

Any of our Subscribers who may be desirous of having their numbers of the GAZETTE *bound should leave them with the Librarian.*

The annual Subscription to the GAZETTE *is* 6s. 6d.; *post free,* 7s. 6d. *All financial communications, as well as subscriptions, should be sent to the Financial Editor,* Mr. C. H. WELLS, SECRETARY'S OFFICE, GUY'S HOSPITAL.

The charge for binding in blue, with the Arms of the Hospital in gold will be ONE SHILLING AND SIXPENCE.

Calendar of Coming Events.

November, 1901.

Sat. 9.—1 p.m., Clinical lecture by Dr. Washbourn.
Messrs. Jacobson and Fripp's take-in; Drs., H. M. Goldstein and P. W. Hammond; Cl., A. Wylie.
G.H.R.F.C., I., Croydon, home.
II., Beckenham, away.
III., Wasps III., away.
G.H.A.F.C., I., Townley Park, away.
II., Cheshunt 2nd XI., home.

Mon. 11.—1.15 p.m., Clinical lecture by Mr. Brailey.

Wed. 13.—1.30 p.m., Clinical lecture by Mr. Howse.
G.H.R.F.C. I., Royal Naval College, away.
III., Royal School of Mines II., home.

Thur. 14.—Messrs. Howse and Symond's take-in; Drs., J. Braithwaite and H. S. Jones; Cl., H. K. Lacey.
G.H.C.U., Address by A. C. Tessier, Esq.

Sat. 16.—1 p.m., Clinical lecture by Dr. Washbourn.
G.H.R.F.C., I., Bedford, away.
II., Westminster Hospital, home.
G.H.A.F.C. I., Ipswich, away.
II., Townley Park 2nd XI., away.

Mon. 18.—1.15 p.m., Clinical lecture by Mr. Symonds.
Final Fellowship Examination.
Cambridge Third M.B. Schedules to be brought to Medical School for signature.

Wed. 20.—1.30 p.m., Clinical lecture by Mr. Howse.
G.H.A.F.C., I., Hastings, away.

Thur. 21.—Messrs. Lucas and Lane's take-in; Drs., B. Glendining and H. S. Brown; Cl., A. C. H. Gray.
G.H.C.U., Missionary Meeting.

Sat. 23.—1 p.m., Clinical lecture by Dr. Washbourn.
G.H.R.F.C., I., Old Merchant Taylors, away.
II., Old Merchant Taylors II., home.
III., Polytechnic "A," away.
G.H.A.F.C. I., Reigate Priory, away.
II., Balham Wanderers, home.
G.H.P.P.S., Pathological Evening.

Guy's Hospital Gazette,

NOVEMBER 9, 1901.

Associated Lesions in the Thorax and Abdomen.

CLINICAL LECTURE BY DR. PITT.

October 19th, 1901.

GENTLEMEN,—Two cases in the ward illustrate my theme. I gave a clinical lecture a week or two ago, on a woman with an obscure abdominal tumour, and I pointed out she had had a gland removed from her neck, and had also some slight signs in her lung which made it probable that the tumour was tuberculous, the thoracic signs helping considerably in the diagnosis.

As another illustration, I may refer to a woman aged 30, who was admitted last night, about whom we are still uncertain. She is extremely ill, with a temperature of 103°, and a pulse of 96. She has been complaining of pains in her joints for a few days, with severe vomiting during the last day or two, and of great pain in the left hypochondrium, where there is some abnormal dulness. On listening at the base of the left lung you can hear a rub, and it is quite clear that she has some pleurisy. There is little doubt that the pleura has become infected by some condition below the diaphragm, but we have not yet made up our mind as to its nature

(a week later it became clear that there was an infective embolus in the spleen with infarction). Still this pleurisy shows we are dealing with an inflammatory abdominal process. This is also corroborated by the blood examination, as Mr. Gray found this morning 24,000 leucocytes per c.mm.

I thought, therefore, I would take as the subject of my clinical lecture to-day "Associated Lesions in the Thorax and Abdomen." The subject was put into my mind by a very interesting address given a few days ago by Dr. Mitchell Bruce, and the number of cases which illustrate the association make it a very suitable subject for discussion. The inter-connection of all parts of the body with one another is generally accepted, and it will be well worth our while to consider the pretty definite associations which exist between certain lesions below the diaphragm and others which occur in the thorax. It is very important to bear in mind what combinations of lesions may occur, because it often helps you to clear up what may otherwise be obscure in diagnosis. If you confine your attention to only one cavity you may not be able to explain the development of the symptoms by any local lesion, and it is important to examine distant organs, even when you are satisfied that they have been normal, because there is nothing more striking than the way in which, if you watch a chronic case, you are apt to overlook the development of further lesions where a stranger detects them at once. The tendency is to assume that if you have a lesion of one organ, you are not likely to get a development of disease in quite a distant part of the body without some symptom that will attract your attention; and yet lesions may develop in other parts of the body which can only be detected by physical examination, and to which your attention would not be attracted merely by symptoms.

I should like, first of all, to remind you of the way in which the circulation is carried on through the peritoneal cavity. Although the peritoneal cavity, in health, is practically empty and dry, a constant circulation is going on from one side to the other, and the moment you interfere with the excretory portion of the process, the fluid begins to accumulate. The probabilities are that whenever fluid accumulates in the cavity it is much more due to the defective excretion than to an excess of secretion. The peritoneal surface is very deficient in lymphatics over the pelvis and over the intestines, and the most important lymph stream is carried on through the diaphragm. There is some divergence of opinion as to what amount of lymph is carried through the parietal walls. Probably the amount is comparatively small, and certainly the most important route, through which the fluid is carried, is through the diaphragm. It has been shown that in the diaphragm you have apertures in the connective tissue of considerable size, which would allow fluid to pass through rapidly. There are stomata between the epithelial walls through which fluid can readily pass, and undoubtedly the active mechanism is the pumping carried on by the movement of the diaphragm. It is extremely common to find when the under surface of the diaphragm is affected with any infective process, that the infective process spreads to the upper side, and the diaphragmatic surface of the pleura always becomes involved. The current for the most part is carried through to the anterior mediastinal glands, and you should always examine these glands to get a true idea as to the bacteriology of any lesion in the abdominal cavity.

That cavity, however, has another very important drain. The lymphatic stream is that by which serum, blood, organisms, and colloid bodies pass; but the salts and water are rapidly absorbed into the blood-vessels. So that you have the lymphatic track for the colloids and solid particles, and another channel into the blood-vessels through which the salts and water pass. If you inject insoluble particles suspended in water into the peritoneal cavity of an animal, and suspend that animal by its tail, you will in the course of four or five minutes find these particles within the anterior mediastinal glands. If you hang it up by the head you will scarcely find any of the particles in those glands within five hours; clearly showing that it makes all the difference whether the particles are allowed to gravitate down to the pelvis or the diaphragm. It also becomes an important factor in disease;

if you have pelvic mischief you are much more likely to keep it localised by keeping the patient's head raised. On the other hand, if you have excess of fluid in the peritoneal cavity, you are more likely to help the absorption of the fluid by raising the end of the bed.

In consequence of the important action of the diaphragm and of gravity, you see that infection in connection with the upper part of the peritoneum, such as over the liver, spleen, and stomach, very much more readily affects the upper surface of the diaphragm, than disease in the region of the appendix or pelvis. Hence a large number of cases of pelvic peritonitis will occur with local suppuration without infection of the pleural cavity. Still, a certain number, where the infection spreads throughout the peritoneum, will involve the pleura. You consequently find that in considering what proportion of cases of empyema or pleurisy result from abdominal inflammations, you have to pay special attention to those in the upper part of the abdomen. When you have inflammation spreading from the lower part of the abdomen to the pleura, it is either because the adhesions are not very numerous, or the process has not become encysted, and the fluid has remained thin and consequently involved the upper part.

I wish to draw your attention to the abdominal lesions noticed in connection with empyemata, and point out the way in which they affect the thorax. Taking a series of sixty-two cases of empyemata due to streptococci, you may divide them up—first of all, into the *pulmonary* as the seat through which streptococci have infected the tissues, of which there are twenty-five; then the *abdominal*, of which there are fourteen; the *chest wall* of which there are three; the *mediastinum*, of which there are two; and specific fevers, of which there are five; and there are twelve which you may call primary, that is to say, you could not make out the cause. A few remaining ones are due to general pyæmic conditions.

With regard to the abdominal cases in this particular list, eleven were due to puerperal peritonitis. I should here remark that a very large number of cases of puerperal peritonitis may exist without pleurisy, and the preponderance is simply because puerperal peritonitis is common. It is remarkable that the puerperal cases occupy so important a place in this list. I have not had time to go through the records of such cases in connection with the Guy's records, but I am certain we should not have anything like that number of puerperal cases. There were three cases of appendicitis, one of gastric ulcer, and one of gall-stones.

Perhaps one-third or one-fourth of the cases then definitely arise from abdominal mischief, and therefore illustrate the association that I want to bring before you. It is very important in post-puerperal pyrexial conditions to bear in mind that you may have definite local pelvic peritonitis which may account for the pyrexia. You not infrequently find that although the mischief seems to be improving locally, the patient appears to be getting worse, and you may find either septic pneumonia or empyema. The same may occur with regard to thrombosis in the veins of the pelvis; the patient is septic, has rigors, and not infrequently develops pleurisy and pneumonia. The great majority of the appendix cases, especially those operated upon early, do not infect the pleura. But there are two conditions to which I draw attention in which appendicitis does do so.

(A). When you have acute widespread peritonitis, you will find that owing to the pumping action of the diaphragm, some of the fluid will be sucked up between the diaphragm and liver, or between the diaphragm and spleen. This region always requires to be mopped out carefully when there is widespread infection of the peritoneum, because it is a surface which specially tends to infect the pleura. Remember, therefore, when you have pus or infective material passing up into that region you are very liable to have infection of the pleura. Sometimes you not only have a rub, but occasionally a collection of pus, and therefore one of the rules to be laid down in connection with all cases of peritonitis, and in connection with appendicitis, is that you should make a point of examining from time to time the right axilla and the right base. The left base will become infected when there is a collection of pus between the spleen and diaphragm.

(B) It occasionally happens that the appendix, instead of having a mesentery and lying in the peritoneal cavity, lies behind the cæcum, and has no peritoneal layer behind it; it is retroperitoneal. In such case, if appendicitis occur, the pus will infect the connective tissue and accumulate behind the cæcum. These are cases in which you are extremely apt to overlook the presence of pus, partly because it does not readily encyst. Owing to the cæcum being in front of the pus, there may be a considerable amount of infection spreading up before you realise that pus is accumulated there; while the pleura also is very readily infected.

In connection with this I will read to you the notes which Mr. Claxton has been good enough to write out for me of a case under my care two or three years ago, to which he was dresser. The boy, two years and four months old, was admitted on March 31st, 1899, with vomiting and pain. He had a very tense and tender abdomen, with a marked swelling in the right iliac and lumbar regions, dull on percussion. The pulse was 160, respiration 60, and temperature 102°. He was apparently mortally ill. I think I am right in saying, he was so ill when he first arrived, that it was thought useless to operate. But with stimulation and infusion of liquid he survived the night, and next day Mr. Dunn opened the abdomen and found general peritonitis. He considered it was one of the worst cases he has ever seen recover. A large amount of foul pus was evacuated; the cavity extended right up to the diaphragm, in front of the kidney, behind the liver, and down behind the bladder. It was washed out and several drainage tubes were inserted. The boy improved, but still his temperature remained up. On the 5th April marked dulness was noted over the right base below the sixth space and also in the axilla, with consonating râles and deficient entry of air. It was quite clear that there was an infective broncho-pneumonia. The next afternoon we explored in the seventh space, and all we could find was a little blood-stained serum, which contained streptococci and staphylococci. His temperature remained intermittent, but his general condition steadily improved. On the 17th April the dulness extended to the fifth rib in front, and the intermittent temperature persisted. On the 5th May an appendicular concretion was removed. On the 12th May, five weeks after he came in, there was a definite empyema at the base of the right lung. It was opened, and a large amount of foul bluish pus came away, containing bacillus pyocyaneus. A drainage tube was inserted and a large quantity drained away daily. The temperature came down, the patient gradually recovered, and on July 3rd he left quite well. This is a very striking illustration of my subject, for although the abdominal wound from the first steadily improved, the boy's health did not. It was also some time before the pus in the pleura was sufficiently near the surface to be detected. A very instructive case, and you will probably meet with similar ones in the course of your experience.

Last year also, I saw in consultation an appendicular abscess which was opened, and the case seemed at first to progress satisfactorily. After a time, the boy again became ill, and it was difficult to make out what was the matter, because attention was at first entirely devoted to his abdomen. It was afterwards noticed, however, that he had an empyema which had started in connection with the preceding inflammation.

Peritonitis.—In fulminating cases of gastric or duodenal ulcer, with a large opening, the patient dies before pleurisy has had time to develop. But when there is only a small leak, especially if it takes place posteriorly, it is not uncommon to find that a marked physical sign is a diaphragmatic pleurisy. In cases where there is a large perforation, and the patient has been operated upon at once, it is most important to get the tissues round the stomach, especially at the back, absolutely clean. The part should be very carefully sponged out, or some slight infection will be left.

Many operations are now performed on the stomach, such as those for gastric ulcers, whether perforated or not; and also gastrectomy and gastroenterostomy. If there has been any infection of the peritoneum, pleurisy will much more probably result than it does after a pelvic operation. After all operations on the peritoneal

cavity, if your patient is not doing well, pay attention to the condition of the pleura, because there may be a latent empyema. If the drainage is good the whole of the abdominal wall may heal without suppuration, and the only suppuration may be that above the diaphragm.

Hepatic lesions. - Of these the most important are hepatic abscess, hydatids opening into bile-ducts, and gall-stones. As to *Gall-stones*, I may give you two very instructive cases. One, was that of a man, aged 55, who had an attack of hepatic colic which lasted for a few days, and then gradually became quiescent. Next week he complained of intense pain and tenderness in the right hypochondrium. Nothing very definite was made out, excepting that he did not use the base of his right lung, and on auscultation there was a dubious rub. Within a few days he became delirious and wildly maniacal, requiring two keepers, and he was an extremely difficult patient to manage. It was quite out of the question to perform any operation at that time; shortly afterwards, the room became excessively foul, his breath was most offensive, so much so that the smell was overpowering even downstairs as you entered the house. He had obviously developed gangrene of his lung. We kept the room saturated with creosote vapour and gave him creosote internally. Under this treatment the stench disappeared and the lung condition quieted down. We thought that if his mental condition improved we should be able to do something later. However, one evening—it was in the middle of winter—he went out on to the balcony, having got rid of his attendants, and was out for some hours, shouting wildly and creating great excitement in the neighbourhood. They were unable to induce him to go in for a long time; he then developed an acute pneumonia and died. Here the gangrene of the lung with a basal infective process originated in connection with a gall-stone, which had become impacted and set up adjacent inflammation. The gall-stone, in passing down or ulcerating through the ducts, infected the connective tissue and secondarily the pleura.

Hepatic abscess.—Very often you are uncertain as to the exact cause of an enlargement of the liver. If there is an abscess in the upper part near under the surface of the diaphragm, the pleura is soon involved. In some cases the abscess may present itself as an empyema. When the disease is limited to the lower part of the liver, the pleura does not become so readily involved. To these lesions we may add perinephric and subdiaphragmatic abscesses. These latter arise from various causes. An abscess of the liver which has opened on to the upper surface, inflammation in connection with a gall-stone, and a perforating gastric ulcer, are three of the most common causes. These are most difficult cases to deal with, because you have a collection of pus on the under surface of the diaphragm, and if the mischief is at all acutely infective, you almost certainly have another on its upper surface. The tendency is to look upon the case simply as an empyema, and it is not until you deal with them operatively that you discover the mischief is more widespread. As to diagnosis, whenever you have an unusual amount of dulness in front, you should always be suspicious of the possibility of the collection of fluid being below the diaphragm. Of course, where both surfaces are involved you will have the pus in the pleura also producing dulness behind. One great difficulty is this. On exploring with a needle, you may draw off fluid, and when the surgeon comes to operate and explores in a different place, he may draw off a totally different fluid. Now, whenever in tapping a thorax you draw off two totally distinct fluids, whether in regard to odour or amount of pus, you may take it for granted that you are dealing with an empyema and a subdiaphragmatic abscess. It is remarkable how very difficult it is sometimes to make certain of hitting off the same collection twice over. If you explore at all low down, you are likely to tap the collection below the diaphragm, whereas if you are exploring higher up, say in the fifth space in the axilla, you will probably be above this collection, while if you explore in front you are again likely to draw from below the diaphragm. This is a difficulty you have to contend with, and it is very important to bear it in mind. There is also the question as to which is the best route by which to drain these subdiaphragmatic abscesses. I do not think there is any

more unsatisfactory way than to drain through the diaphragm, if it can be avoided. What happens, is that as the diaphragm collapses, the tube is constantly slipping out. It is important, then, to bear in mind the possibility of there being two collections of fluid, and the signs by which you can differentiate them.

We had a very striking instance of this in Clinical ward two years ago. A man, aged 45, admitted September 20th, 1899, for pain over cæcum and continued pyrexia; no evidence of typhoid. Evidence of fluid at right base but none could be drawn off on September 30th.

October 4th. Fluid found at fourth space in front, and fourteen ounces of serous fluid drawn off from ninth space behind. No organisms present. Severe diarrhœa developed and patient was very ill.

October 19th. Twenty-eight ounces of foul seropus drawn off from right axilla in sixth space.

October 20th. Axilla opened and a piece of seventh rib removed; no effusion in pleura, but it was entirely below diaphragm; some lymyh on pleura. The subdiaphragmatic abscess was drained and ultimately he completely recovered.

Here there was great difficulty in locating the fluid, and the aspirations from the thorax both perforated the diaphragm and drew off fluid from a subdiaphragmatic abscess.

Pyonephrosis and perinephric abscess.—Some years ago a man came in with an empyema, which was drained, and after a long convalescence he went out. He returned some months later with a large perinephric abscess, and finally died. It was quite clear that his empyema had originally tracked up from the kidney. If we had only recognised this condition at first and treated the kidney as well as the empyema, possibly he would not have developed the perinephric inflammation from which he died; but the pyonephrosis being quiescent it was overlooked.

Cancer.—Cancer of the peritoneum, of the pancreas, of the testicle, and of the stomach, are all forms which tend to spread through the diaphragm and involve the mediastinal glands. Not infrequently the patient may come up with dyspnœa and, apparently, only thoracic trouble, which may yet have originated in malignant disease below.

Ascites may be due to various conditions. It may be tuberculous, cancerous, or what is called simple ascites, which is the form we know least about, hence its name. With regard to the tuberculous form, sometimes there is a collection of fluid in the abdomen and you are not quite clear as to the cause, but when you come to examine the patient's pleura you may also find fluid there. If you have serous fluid in both the pleura and the peritoneum, it may be due to one of two causes; it may be either tuberculous, or it may be malignant.

Much more attention has been paid in Italy to the condition of multiple infection of the serous cavities, to which they have given the name of "Poliorromenitis," a subject on which Dr. Taylor, last year, gave a very interesting lecture. The evidence is very strongly in favour of these cases of involvement of the pleura, pericardium, and peritoneum, being almost invariably tuberculous.

Taking a series of 100 cases of multiple serous effusion, supposing we represent effusion into the left pleura as A, into the right as B, the pericardium as C, and the peritoneum as D, we note the combined frequency is as follows:—

BC	17
AC	16
AB	3
BC	1
CD	1
ABD	53
ABC	3
BCD	2
ABCD	14

Cardiac cases of hydrothorax are not included in the above list

I want to draw your attention to the fact that in one-half of these cases the peritoneum and both the pleural cavities are involved. There is, then, a large group of cases of simple ascites associated with fluid in the pleura, which are probably tuberculosis in origin. The presence of the fluid in the pleura will help to clear up the cause of the ascites.

Typhoid.—Very often at the onset your diagnosis is considerably helped by the presence

of râles in the chest and bronchitis. We have in at the present moment a woman, who has had typhoid for seven weeks, and the whole time the chest has been full of râles. But the râles are not a complication; they are a catarrhal process, secondary to the typhoidal poison.

I might add to the cases which I have given, cardiac cases in which not infrequently there is a *large spleen*, which is due to an infarct, or *ascites*, or *melæna* due to embolism in the mesenteric vessels, or an *enlarged liver*, the cause of which is mitral stenosis. These symptoms, therefore, might be difficult of explanation, were it not for the condition of the heart.

It was only yesterday I saw a patient, with a large mass in the abdomen, which, it had been thought, might possibly be malignant, but which undoubtedly was a very large liver, in connection with mitral stenosis. It had dropped and therefore occupied a large part of the abdomen, so this abdominal tumour was of quite secondary importance.

We may lay down certain maxims with regard to this association of lesions. First, when there is peritonitis you ought to examine the chest systematically every week, or oftener, and when the constitutional disturbance continues without any adequate local explanation, it may often be found in thorax. Secondly, the diagnosis of abdominal lesions may sometimes be cleared up by an examination of the condition of the thorax.

We may now look at the matter from another, the thoracic, point of view. I suppose the commonest cause of *bronchitis* in babies is *bad feeding*. If children are unable to digest their food and are constantly fed on unsuitable food, they develop catarrh with râles in the chest. A great deal of the pulmonary mischief which occurs in small babies owes its origin to this cause. In the same way in adults, in *acute bronchitis*, there is always a great disturbance in digestion, with complete loss of appetite, and in many middle-aged patients you will find that the first essential in the treatment of their bronchitis is to give them a good purge. There is a close relationship between the mucous membranes of the respiratory and the digestive systems. I also want to insist strongly on the fact that when you have an attack of severe bronchitis or pneumonia, especially in stout or middle-aged people, there is a tendency for digestion to become defective, if not entirely in abeyance, and if you press food you may produce an over-distention of the stomach or intestine. A considerable number of such patients die from an over-distended stomach, due to the pressing food, when the digestion is defective. In some cases, temporary starvation will help to alleviate the bronchitis. In measles there is often catarrh of the colon and a great deal of digestive disturbance, as well as catarrh of the mucous membrane of the lungs.

It is not at all infrequent for certain *pulmonary diseases to present themselves as abdominal*. You are all perfectly familiar with the fact that there is an area of cutaneous tenderness which is anatomically related to each organ which does not follow the distribution of the peripheral nerves, but that of the somatic, and is arranged in bands transversely round the abdomen or chest. This is quite distinct from the pain that arises in connection with pleurisy, which is referred to the periphery of the nerves affected. When pleurisy involves the lower part of the chest, the pain is often referred to the umbilicus and the abdominal wall. So that attacks of acute *diaphragmatic pleurisy* are often referred to the abdomen. Patients sometimes come in with what appears to be colic, and not infrequently you think you are dealing with a perforating gastric or duodenal ulcer. There was a patient under my care in John ward, four or five years ago, who came in one night extremely ill with agonising colic. He was a strong man, but was collapsed with the intense agony. He was vomiting, had a rigid abdomen and a high temperature. He had been perfectly well that same morning, the onset of the attack having been quite sudden. He referred his pain to the epigastric and umbilical regions, and gave a history of indigestion for some weeks past. We discussed for a long time whether this attack might be due to a duodenal or gastric ulcer which had perforated, and as to whether we should open the abdomen or not. But on going over him we

noticed that the respirations were very short, hurried and irregular; that on listening over his right base, although there was no dulness, yet very little air was entering, and there was just a doubtful click or two. The fact more particularly, perhaps, that the ratio of the respiration-rate to the pulse-rate was increased, decided me to wait for some hours, as possibly it might be an attack of pneumonia which was developing. After twelve hours there was no increase in his pulse-rate and no evidence that the peritoneal cavity was involved by a toxic process. The evidence in the lung was perhaps a little more definite; still there was no dulness, and it was not until twenty-four hours afterwards that he developed the typical signs of a basal pneumonia.

The same source of error is particularly common in small children with *pneumonia*. Take the case of a boy, aged six, ill with vomiting and diarrhœa, who was brought up to the hospital, with a very high temperature, very disinclined to talk, with a flushed face and a pulse of 100. On examining him there were no physical signs observable about the chest. His pain was referred to the umbilicus, and the abdomen was very rigid; within two or three days typical signs of pneumonia presented themselves.

A very considerable number of cases of pneumonia also, probably one-quarter, start with marked digestive disturbance, such as vomiting and diarrhœa, the poison affecting both systems. As a rule, the prognosis in a case of pneumonia that starts thus, is much more serious than in a case which starts with a rigor. The mortality of cases starting with vomiting and digestive disturbance often runs up to 40 per cent.

If you only bear in mind the possibility of abdominal pain having originated in the thorax, and weigh the value of the evidence, you generally find that within two or three days you can come to a definite diagnosis; it may be three days before you can be absolutely certain. One of the most important factors is the ratio of the respiration to the pulse-rate. In abdominal lesions the pulse is that to which you pay attention; in peritonitis and toxic conditions it always becomes rapid and you must pay much more attention to it than to the temperature, which may be subnormal even in cases that will prove fatal.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

The Clinical Wards.

DEAR SIR,—In your leader of the 26th ult., you deal with the new regulation by which referred candidates are to receive instruction in the Clinical wards. On purely sentimental grounds, I cordially endorse what you say, but when you attempt to hammer out the question on matter of fact lines, I must most strenuously join issue with you.

I believe I am right in saying that the Medical School, in its annual scramble for the ingenuous student, makes no mention, public nor private, of the "sacred portals of Clinical." Any man who enters Guy's Hospital as a student, does so in the belief that *all* the wards of that institution are available to him for clinical study. He knows nothing of that very select little club, Clinical, and it is only after some years' work that he finds that in the matter of the number of beds, as in other details, the promise exceeds the fulfilment. No one who has held the post of Clinical doubts the great value of this appointment in the training of men for "after work as residents and practitioners," and therefore cannot deny that the enlargement of the scope of this department must lead to the perfecting of more men for the duties of general practice. And this should be the aim of every medical school. The training must be for the many and not for the few.

I fail to see why an increase in the following of any particular physician should tend to completely alter his teaching. It might certainly tend to eliminate certain rash statements and sporting shots, in much the same way that an increase in the number of players renders more remote the chance of holding a successful nap hand. What may be courageously whispered to a few is wisely omitted in an address to many lest one should arise and rebuke.

Nor can I see that the Clinicals, as you most certainly suggest, are of such superior excellence to the average Conjoint man. You must admit that many of them are average Conjoint men—very average Conjoint men—and that they experience the same vicissitudes as do their less favoured colleagues. Some of them even get ploughed in medicine!

You make a very grave charge against the teaching of the Medical School when you assert that "it is a well-known fact that the latter (*i.e.*, a sound knowledge of physical signs) is a great stumbling block at the College."

You probably mean that ignorance of physical signs is a stumbling-block; a condition of affairs which is most grave. Do your physicians and your registrars no longer make it their business to teach men the rudiments of their profession? Is it a fact that men are permitted to waste their money and time in presenting themselves at the Colleges when they are incapable of interpreting the ordinary objective signs of disease? I sincerely trust that your zeal has led rather to an exaggeration than to a plain statement of fact.

Finally, for I fear that I have already occupied too much of your space, may I ask how you reconcile your statement that "*junior* men would find that it would not be to their best interest"—the italics are mine—"to frequent the Clinical wards," with the specific statement of the new regulations "that they apply to referred candidates?" Is there not still a "five year's regulation?"—I am, Sir, yours faithfully,

PRACTITIONER.

SIR,—It is almost with pain that I read the letter signed "Pink Paper," in your last week's issue. That individual, whoever he may be, cannot see in his blindness on the subject of the new regulations regarding "Clinical" that "the clouds he dreads so much are big with mercy," as that old friend of our youth, Cowper, observed. It has been apparent to all who have an extensive knowledge of Medicine in the "Final Conjoint" (as perhaps "Pink Paper" has) that the examiners have been, to the best of their power, testing the practical knowledge of men, and have shown a remarkable interest in abdominal cases. I venture to say that "Pink Paper" did not see many of the latter in the medical wards, and the new order will be greatly to his benefit by enabling him to gain some insight, however slight, into that most difficult region of medicine. The pathetic wail he makes at being torn ruthlessly away from his old friends "bruits and râles," and his beloved "nervous cases" that he can examine from daylight to dark if necessary, is quite uncalled for, as he can go into the general wards every morning and three afternoons in the week, should he choose to do so.

Cannot his would-be wit at the expense of the Clinicals be attributed to a reverse in applying for this appointment, which he scorns so much?—Yours, etc.,

ANOTHER "PINK PAPER."

Out-Patients' Christmas Tea.

DEAR SIR,—Once again the time has come round for making our annual appeal for help in getting up the Out-Patients' Tea. The popularity of this entertainment is now too well known for there to be any need to urge its claims for support. Collecting cards and books have already been distributed, and it only needs the enthusiastic generosity of students and friends of the hospital to enable the committee to give the Borough children a treat that is all too rare an event in their lives. It may not perhaps be generally known that each of the five hundred children is given a useful garment. As can be easily realised, to collect so large a number of clothes is no light task. For the guidance of friends I append a list of things that will be most welcome:—For Boys (7 to 14 years): Shirts, socks, knickerbockers, coats, boots. Girls: Frocks, stockings, petticoats, mufflers, etc., etc.—Yours sincerely,

J. A. HAMMOND, Hon. Sec.

Rugby Football.

DEAR SIR,—May I, through the medium of your columns, call attention to the numerous scratchings which occur week by week in the various Rugby teams of the hospital. If Guy's intend to retain the Hospital Cup an entirely different condition of affairs will have to prevail, and as soon as men recognize this the better, both for the safety of their own places and for Guy's.

At the same time, may I remind men, that any spare energy which they may possess will be better spent in playing harder, than in senseless chatter either with the opposing team or with the referee, a habit neither conducive to good play or to the maintenance of the reputation of Guy's.

Thanking you in anticipation.—I am, yours truly,

HORACE CUTLER,
Captain, Guy's Hospital Rugby F. C.

November 5th, 1901.

The Debating Society.

THE first meeting of the present session took place on Saturday, the 26th of October, in the smoking room, about forty members being present. Dr. Pavy took the chair at 8 p.m., and the minutes of the previous meeting having been read and confirmed, he called upon Mr. HOLLIST to propose, "That the present system of granting medical degrees is unsatisfactory."

The hon. member attacked London University in no mild strain, and proved conclusively (to his own satisfaction) that not only was the said University a "mere myth," but that the standard of practical work demanded by its examiners was no better than—if not inferior to—that required for the L.S.A. Having eulogised the L.S.A. Diploma, he became bitterly sarcastic at the expense of the Irish and Scotch Universities, while the provincial schools were beneath his notice. The hon. member was warmly applauded on resuming his seat.

Mr. BOLUS took up the cudgels for his university, and in a short but well-put-together speech, endeavoured to show how mistaken the proposer was. He considered that the large amount of preliminary work required for the London Degree was effective in bringing forward better men than those who were educated under the conjoint regulations.

Mr. KENNETH BLACK then delighted the house with his clear and elegantly enunciated sentences. He had evidently been studying naval engineering, for he detailed an ingenious metaphor, in which he likened the medical student to a warship. "Even as the destroyer buckles in its trials, so does the medico in his." He opposed the motion.

Mr. GIBSON, in supporting the proposer, took the last speaker's metaphor and converted it to his own use. Mr. Gibson has long been one of our best speakers, but has latterly improved greatly.

Dr. BRUCE pointed out that the great advance in modern surgery was due to the work done in our physiological laboratories.

Mr. BRAILEY, with his South African laurels still fresh upon him, considered that the main fault of London University was that no residence was required.

Messrs. Roberts, Kitchen, Griffin and Hodson having spoken, the hon. proposer replied and the subject was put to the vote. The motion was lost by 24 votes to 8.

A hearty vote of thanks to Dr. Pavy having been unanimously carried, the proceedings terminated.

A Bottle of Stout and England.

ON the chance that others may not have heard of an entirely new treatment warranted to cure diseases of all kinds, even more surely than the celebrated Pink Pill—I am laying my knowledge open to all Guy's men.

They call it war in South Africa. Work may be summed up in a very few words and less treatment. Bullet wounds! We never see them. No, a doctor's life is much as follows in the war at present. I give two cases.

CASE 1.—"*Fell off my horse and hurt my back.*"—This class includes nearly 50 per cent. of total admissions! Visions of Gray and the four muscular layers float before your mind. You can remember the name of a muscle or two, but what they do and how they act are forgotten. Never mind, remember the old motto "Dare quam accipere," and apply blisters from neck to sacrum. Try milk diet (condensed only obtainable), try m.m.c.m.s. ʒi. 4tis horis; try anything you like, the result is always the same—no improvement. Put them on a bottle of stout and recommend them for England—in five minutes the pains have gone and the patient is cured.

CASE 2.—"*Shooting pains round the 'eart.*"—Now you've a chance at last. You recall the registrar in Philip or Stephen, you recall all your past hours spent in lectures, you read the GAZETTE and ask yourself, "Are not many patients supposed to be suffering from gastric ulcer, etc." (title too long to write), you repeat all the axioms of the out-patients department' and say, "Whenever you have an anomatous sore—think of tubercle, syphilis, or self-infliction." Alas you are beaten. You try the infallible "biniodide," you wonder if he has 200 grms. of urea before operating, you propose an incision from ensiform to pubes *viâ* the twelfth rib, you put him on "takadiastase and $\frac{1}{20}$ gr. calomel," you may find indeterminate breathing and argue with yourself for two hours as to what that is. You can say it is most "remackable," and propose gastrostomy with two or three tubes left in the œsophagus, you can say, "Well, there he is, you know, my dear," but none of these remedies will much avail. Suddenly, oh joy of joys! you have remembered "gums and knee-jerks," because "they are so important." Gums, of course, how stupid to forget—why this is war time. Those clinical lectures are good after all. You ask, "Have you had anything to do with lead," the remaining patients titter, and from a corner comes, "Anything to do with lead? Why he's been a runnin' away from it for months." Your hopes are shattered again. However, you examine his teeth and find two molars (not in juxtaposition), a canine and incisor all that are left of the thin red line, or is it blue? Our last hope—the knee-jerks. Hullo! What's this? "Eureka!" "saved!" the shiny air bubbles have betrayed the secret. Lo! a patch of psoriasis the size of a sixpence. Now for a blood examination (*vide* GAZETTE, our only book), seven eosinophiles, three poikilocytes, five brace of normoblasts, one megaloblast, and plenty of your own blasts on the field of blood, is the total bag. A bottle of stout and recommended for England effects a cure on an average in twenty-five minutes. In your excitement you forget the knee-jerks.

Oh for Guy's again! How willing would one be to sit on the 1s. 6d. side for a week, or even pay 3d. for the *sight* of a cauliflower. Oh for a game of squash! Oh for a smoke on the colonnade! Oh for a going-off night! But these things cannot be, so don't make a favour of it.

DUYUNO?

Guy's Hospital Dental Society.

THE opening meeting of the Dental Society was held on Friday, October 11th, in the Physical Theatre. The President, Mr. E. B. Dowsett, occupied the chair, and opened proceedings with an address as follows:—

GENTLEMEN,—This society is now seven years old, and as a student I had the pleasure and honour of being present at its first meeting. Little did I imagine then that I should one day be occupying the chair as your President, which post was at that time being so ably held by our Senior Dental Surgeon. Gentlemen, I thank you from the bottom of my heart for this overwhelming honour you have so graciously bestowed upon me. I am painfully aware of my inability to discharge the duties of the office as they should be, and my task seems still more difficult when I remember the able way in which the post has just been filled by your vacating President, Mr. Payne.

With an earnest promise from me that I will endeavour to do my best—a genius can do no more—to promote the objects of this society, and thereby render its meetings successful and profitable for the ensuing year,

I sincerely hope we may have an excellent season in every respect.

This being a society whose active members are mostly students, and many of those newly joined, this must necessarily be somewhat of a fatherly address, and again I must say that I am even incompetent to act that part properly, but there are nevertheless one or two points I should like to lay stress upon for your possible future guidance.

The art and science of Dentistry, as you know, has of recent years taken *enormous* strides, and what is more, these strides have been getting greater and greater towards the present time, and the journey is by no means finished yet, nor is the pace slackening. And I am afraid the ordinary present-day dentist does not at all appreciate this progress, unless he looks back very carefully into the general work of dentistry, let us say thirty years ago, and compares it with that of to-day.

Now if we as practitioners do not fully appreciate this rapid rate of progress without some amount of consideration, but merely look upon it as a matter of course, how are the public at large to do so? And this brings me to my point—that, speaking very broadly, present-day dentistry is far in advance of the public appreciation of it! This is a sweeping assertion, but nevertheless applies with a large majority of one's everyday patients. Of course, one is frequently coming in contact with people who *do* thoroughly recognise and appreciate good work, but one is also coming across at the same time a still larger number who do not do so. Of these latter, to cite merely one incidence, large numbers are under the impression, even at the present day, that if a filling lasts two years or even a year, they should be quite satisfied, to say nothing of countless other matters in dentistry of which they are entirely ignorant.

Now this is not as it should be. Therefore, I say to you—Educate the people. Make it your earnest endeavour to get appreciation of dentistry from your patients. Please do not misunderstand me when I say this, and think that I mean you to look at it from a *selfish* point of view. Far from it. But what strikes one so forcibly at the present time, as a young practitioner, is the large number of people in all grades of society who are incapable of judging good from bad dentistry, and who know but little or nothing of the possibilities of dental science. Nor do I mean that you must laud your own work, or give scientific demonstrations to all your victims, but many opportunities will arise for you to explain to them matters in dentistry, both political and scientific, of general interest to the public—why this is done and why that is done, what is possible here and what is possible there. Such opportunities should not be lost. By so doing you should gain the confidence of your patient as an extra reward; you will take a new interest in the general routine of everyday work. Your patient and you should be both benefited thereby, and you will be doing the profession an undoubted service. If this knowledge were imparted to the public, which it certainly can be—and it is only we who can do it—I feel certain it would tend greatly towards the advancement of dentistry as a science and a profession.

Another point I should like to impress upon you is not to lose touch with this rapid advancement of dental science when you become practitioners. Interest yourselves not only in the daily routine of your practice, but in dental science in general, and I use the term *science* in its broadest sense. Not only follow the track made by the workers in this inevitable progress, but endeavour to help make the track, however little assistance you may give, and it may be the lot of some of you to help it considerably. There are many fields of research, invention and improvement yet unexplored in dentistry, and it is for the younger members of the profession, unhampered with overwhelming practice, to open up, fertilise and cultivate these fields to the best of their ability.

Gentlemen, in conclusion, I must again thank you for conferring this great honour upon me, and I trust that you for your part will help to ensure the success of the society by endeavouring, every one of you, to bring forward *something* in the way of a communication during the coming session—anything from a supernumerary tooth as a "casual" up to a paper on the dentitions of the extinct animals of the Eocene period.

Mr. Aubrey having brought forward a model showing a supernumerary tooth separating the central incisors,

The Chairman called on Mr. H. C. Visick for his paper on "A consideration of the relationship between Superior Protrusion and Mouth Breathing."

The paper was well illustrated with photographs and plaster models (in sections) of cases, and was followed with much interest. An animated discussion followed, in which Messrs. Dowsett, C. S. Morris, Pearce, Cole, Griffin, Walton and Spiller took part.

The meeting closed with a vote of thanks to Mr. E. B. Dowsett for occupying the chair.

Papers by Guy's Men.

An Address on Examinations and the Education of the Special Senses. By Thomas Bryant, M.Ch., F.R.C.S. Eng. and Irel.—*Lancet*, 26th October.

The Effects of Lead upon Lead-workers in the Staffordshire Potteries. By Frank Shufflebotham, M.A., M.B., B.C. Cantab.—*Ibid.*

Remarks upon the Anthropological Examination of Asylum Patients, with a Scheme for the Same. By E. Goodall, M.D.—*British Medical Journal*, October 26th.

A Clinical Lecture on Enteric Fever. By J. W. Washbourn, C.M.G., M.D.—*The Clinical Journal*, October 26th.

A Clinical Lecture on the Nasal Discharges of Children. By F. J. Steward, M.S., F.R.C.S.—*Ibid.*, November 6th.

Some Points in the Ætiology of Dental Caries. By Kenneth W. Goadby, L.R.C.P. Lond., M.R.C.S., L.D.S. Eng.—*Journal of the British Dental Association*, October, 1901.

An Attempted Definition and Classification of Diseases on the Basis of Causation.

By Mr. S. W. MacIlwaine.

(continued.)

This classification is based on the following definition of a Disease :—"The pathological results of an interference with the physiological state by a disease-cause." Diseases thus defined are due to causes of intrinsic or of extrinsic origin; some sub-divisions of these two classes are here suggested. Some examples are also given of symptom-groups of undefined causation; in other words, so-called diseases which do not conform to the above definition.

INTRINSIC.

Wear and Tear.	Heredity (gouty, syphilitic, tuberculous, alcoholic, etc.)	Incomplete development.	Function-failure.	Unphysiological stress.
Various senile changes, etc.	Eczema, migraine, epilepsy, rickets, struma, nervous instability.	Idiocy, imbecility, congenital heart defects congenital hydrocele, spina bifida, cleft-palate, etc.	Gout, lithæmia, hysteria, epilepsy, chorea, asthma, diabetes, lateral curvature, knock-knee, flat-foot, chlorosis, etc.	Writer's cramp, emphysema, athlete's heart, transverse fracture of patella, traumatic arthritis, corns, porter's pads, ? epithelioma.

EXTRINSIC.

Parasitic.	Ingestion of non-parasitic matters.	Violence.	Electricity.	Heat (excessive or deficient).	Light.
Tubercle, typhoid, ague, dysentery, empyæma, cellulitis, intestinal worm troubles, hydatid disease, itch, etc.	Poisoning by lead, alcohol, opium, etc. Pellagra, rickets, scurvy, tetany.	Fractures, dislocations, wounds.	Shock, etc.	Heatstroke, frost-bite, eczema solare, etc.	X-ray dermatitis, etc.

Symptom-groups of Undetermined Causation; at present called Diseases:—

Anterior poliomyelitis, insular sclerosis, spastic paraplegia.
Cirrhosis of liver and kidney, apart from gout, alcoholism, etc.
Metritis, endometritis, etc.
Glaucoma, iritis, ophthalmia, etc.
Otorrhœa.
Myxœdema, acute yellow-atrophy, etc.

Passim.

In another column will be found an appeal on behalf of the Out-Patients' Christmas Tea. In the eyes of the Boro' boy and girl this is quite a national event; many weeks before it takes place they have begun to clamour for tickets and to anticipate the realisation of cake and an entertainment such as rarely falls to their lot. Although the Tommy of the Boro' may not be blessed (or cursed) with the fertile imagination of that "most delightful little monster," Sentimental Tommy, one has only to see the rapidity with which the tea and cake disappear on these occasions to realise that at least in appetite he is not wanting, and many is the boy, who like Barrie's Tommy, whispers exultantly to his neighbour, "Quick, feel my pocket" (it bulged with two oranges), "now the inside pocket" (plum-duff), "now the waistcoat pocket" (threepence), "look in my mouth" (chocolates), "I'm full" (struggling with his waistcoat), "Oh I *am* full!" We feel sure that all will do their utmost in helping Sister Out-patients to make the coming tea, if possible, even a greater success than the previous ones.

The innovation in the Clinical ward and our remarks thereon in our last issue, have been the subject of much discussion. Although the general opinion runs on the same lines that we have taken up in regard to this matter, we are glad of the opportunity of publishing two letters which discuss the matter from the opposite standpoint.

With regard to "Practitioner's" letter, the fact that whilst approving on sentimental grounds, he thinks fit to cavil on threshing out the question, shows that he writes in the spirit of a quibbler. No one requires "Practitioner" to point out that Clinical is an open ward, but it has been an unwritten law, which has been tacitly obeyed by men (recognising that it was for the universal benefit) that the ward should be reserved for those actually holding an appointment there. We quite agree with "Practitioner" that if possible the "training must be for the many and not for the few," but writers on political economy have repeatedly shown us that in striving to maintain "the greatest good for the greatest number," only too frequently the few have had to suffer with no gain to the many.

A well-known American lecturer once said that he always pictured to himself a deaf man in the back row, and spoke accordingly. A physician, knowing that he has some lesser lights among his following, cannot but pitch the key of his teaching to suit their compass. "Practitioner" would have it thought that we have cast a slur on the teaching in the Medical School, but we may point out to him that physical signs are a question of practice rather than teaching. Would he blame a great pianist because his pupil failed in execution? An ear for the finer qualities of physical signs cannot be acquired in the lecture-room. With regard to our use of the term "junior man," to which "Practitioner" takes so much exception, we used it in a relative sense, and were judging men rather by their ability than the length of their studies.

A Smoking Concert is to be held on Saturday, November 30th, in the College. It is not going to be so important a concert as one that will be held later in the season, but in order to encourage any undiscovered talent in the hospital, only Guy's men will appear. The merits of the senior men are usually known, but unfortunately freshmen have little opportunity of showing what they can do, and so are often passed over without an invitation to perform. Mr. A. W. Ormond, into whose hands the management of the smoker is entrusted, will be delighted to hear from any men, particularly freshmen, who will assist in the entertainment.

The first of the Rev. P. N. Waggett's two lectures was given in the Court Room on Tuesday last. The paper was so excellent that it is to be much regretted that more men were not present to hear it; however, at the next—which will be given on Tuesday, November 19th

—the time has been altered to the more convenient one of 4.30 p.m., and as Mr. Waggett will then deal with the practical side of his subject, it is hoped everyone will make a special effort to support him.

THE subscription list for the testimonial to Mr. Collier is already of goodly size, and we are requested to say that any further donations should be sent to Mr. Williams, the Counting House, before Nov. 16th, as the list will be closed on that day.

BY the daily papers we see that the hospitals of London are to benefit largely by the will of the late Mr. Matthew Whiting. All Guy's men will be delighted to hear that a large sum, probably about £10,000 will be added to the funds of our own hospital.

THE Students' Glee Club has made a really good start this year, and the number of men who have turned up to the meetings testify to the keenness of its members and the success of the club. The basses at present are considerably in the majority over the tenors, and any men of the higher register who have not already joined will be welcomed eagerly. The first combined meeting with the Nurses' Choral Society was held on Friday last and was most successful.

WE wish to draw attention to the letter from the captain of the Rugby Club on the number of scratchings that have occurred in the various teams. This evil is much in evidence this year, and as vaccination does not disable men for weeks we can only conclude that it is due to slackness. This is a serious charge so early in the season, and it must be looked to. Keenness and regular playing raised our First XV. to what it is now, and it will be our own fault if we allow ourselves to fall back in the race as we have plenty of material at the hospital for several really good teams.

THE First XV. had a very enjoyable trip to Paris, and in spite of a rather scratch team defeated the Racing Club de France by 1 goal and 1 try to a try. The game was played at Auteuil, and in consequence of the extremely late beginning was very short and closed in moonlight. Our forwards were much the better, but the keen tackling of the French backs prevented our team from making a large score. Both teams dined together after the match. Against Rosslyn Park, on Saturday last, we were extremely unlucky to lose by a goal and a try to 2 goals. The forwards played a really good game, but owing to the absence of O'Brien and Orpen from the three-quarter line our attack was not of its usual strength.

THE First Eleven suffered somewhat severely against West Norwood in the first round of Surrey Senior Cup, retiring defeated by five goals to one. Although West Norwood were decidedly the better team, the advantage on their side was not so great as the score would seem to indicate. Owing to the fog, we had to start with only six men, and by the aid of some good dribbling, were within an ace of scoring before the others turned up. The Weybridge match, last Saturday, produced a better game, and finished in a draw of two goals each. Up to the present the composition of the team has varied very extensively. It is to be hoped that when the regular team is chosen, we shall see a marked improvement in combination.

LAST Wednesday night the Physical Society met, and Mr. P. T. Manson read his paper "On some Tropical Diseases seen at the Albert Docks." The paper was a capital one, written in a concise, curt style. It gave a very clear account of some of the chief points in relation to malaria and tropical abscess of the liver. It was listened to with great interest by the large number of men present. After the paper numerous questions were hurled at Mr. Manson, these he ably replied to, and altogether a most enjoyable hour was spent.

THE English stage has, in the past, copied much from the French drama, but it is to be hoped we shall be spared the latest development in Paris, where a play has just been produced, written round the delicate question as to whether a doctor ought to reveal the nature

of his patient's disease without the latter's instructions. The heroine is phthisical, and the dialogue discusses how tuberculosis may be contracted; kissing and hand-shaking, as a possible means, are defended and condemned. It would indeed be a sad day for English playgoers, if our dramatists were to substitute pathology for pathos, or to trace the course of a disease rather than the dramatic development of some human emotion.

THE results of the recent Final Conjoint Examination are extremely gratifying to the Medical School. To all successful men we offer our congratulations.

THERE is often a spirit of freshness and spontaneity about unconscious wit that professional humourists, labour as they may, cannot catch. The following "facts" would seem to exemplify this:—A blind patient lead by his friend up to the dispensary window, "Please pothecary will you serve me at this bar? The other one is full!" Again, Rachel Blavatsky, with a dental extraction card, "Vill you please let me have gas for 4½d.?" Whilst another patient wants her medicine free because "My husband collects prescriptions on a barrow for the 'Ospital fun'." Materials might almost be collected for a book on, "Life as seen through the Dispensary Window."

Guy's Hospital Students' Club.

The Annual General Meeting of the Students' Club was held in the Physiological Theatre, on Wednesday, October 30th, at 4.15 p.m.

Dr. Pye-Smith was in the chair, and about thirty members were present.

The treasurer being unavoidably absent, the secretary put the balance sheet before the meeting, and explained the budget for the coming year.

The meeting passed both balance-sheet and budget, and after a vote of thanks had been proposed by Mr. Curtis, and seconded by Mr. Cross, to the Chairman, the meeting adjourned.

Statement of Receipts and Expenditure from September 1st, 1900, to August 31st, 1901.

1900. Sept. 1st. RECEIPTS.	£	s.	d.	£	s.	d.
To Cash Balance at Bankers ...	33	9	5			
„ Petty Cash balance	2	14	9			
				36	4	2
1901. Aug. 31st.						
To Cash received—Clubs' Union Account Grant				149	15	10
„ Cash received—Clubs' Union Account Rent				130	5	6
„ Cash received–Library Account—						
Deposits	5	5	0			
Fines	0	7	8			
Sale of Papers	0	15	0			
				6	7	8
„ Cash—Pavy Gymnasium Account—						
Locker Deposits	1	10	0			
„ Rents	0	18	0			
				2	8	0
„ Cash—Bonus from Hand-in-Hand Insurance Co.				0	12	0
„ Cash—Sale of Wine, Beer, etc. ...				498	13	0
				£824	6	2

1901. Aug. 31st. EXPENDITURE.	£	s.	d.	£	s.	d.
By Cash paid—						
Newspapers, Magazines, etc.	30	10	8			
Printing and Stationery ...	1	12	6			
Sundry Disbursements ...	37	8	3			
Petty Cash ditto ...	1	0	6			
				70	11	11
„ Cash paid on Gymnasium, etc.—						
Hon. Secretary	26	0	0			
Cleaning and Lighting ...	7	16	0			
				33	16	0
„ Cash paid on Library Account—						
Librarian	12	0	0			
Deposits returned	2	2	0			
Mudie's Subscription ...	5	5	0			
Re-binding Directory ...	0	3	6			
				19	10	6
„ Cash paid—Pavy Gymnasium Account—Locker Deposits returned				1	5	0
„ Insurance Premium				0	12	0
„ Clerical Expenses				3	0	0
„ Cash paid—Cost of Wine, Beer, etc. ...				498	13	0
„ Cash paid—Rent Account ...	98	13	3			
„ „ „ „ ...	31	12	3			
				130	5	6
„ Cash Balance at Bankers ...	64	18	0			
„ Petty Cash balance in hand ...	1	14	3			
				66	12	3
				£824	6	2

W. HALE WHITE, Hon. Treasurer.
ARTHUR W. ORMOND, Hon. Sec.

Audited on behalf of the Clubs' Union and found correct, October 26th, 1901,
D. H. TRAIL.

An Old-time Tavern.

"The Cheshire Cheese."

One of the few remarks made by Dr. Johnson which escaped the note-book of Mr. James Boswell should be framed and glazed and hung on the walls of every old-fashioned inn in London. He observed that "a tavern chair was the throne of human felicity," adding "As soon as I enter the door of a tavern I experience an oblivion of care and a freedom from solicitude; when I am seated, I find the master courteous and the servants obsequious to my call; anxious to know and ready to supply my wants; wine there exhilarates my spirits, and prompts me to free conversation and an interchange of discourse with those whom I most love; I dogmatize and am contradicted, and in this conflict of opinion and sentiments I find delight." This is no faint praise, but similar encomiums could be furnished from his contemporaries without even resorting to Shenstone's well-known lines in praise of tavern hospitality.

At this distance of time we find it difficult to appreciate the likes and dislikes of the eighteenth century. When dining at the Criterion, or some other debased substitute for the old-fashioned tavern, do we "find the master courteous and the servants obsequious to our call"? Indeed, do we find "the master" at all? To dogmatise, contradict and create a conflict of opinion is a lost art, and would be dangerous in such proximity to Vine Street. If gifted with a very vivid imagination, we can picture Dr. Johnson's dining amid all the gilded splendour and ostentation of a modern restaurant, opposite an elegant "vase en fleur," and his trusty companion jotting down the following utterances in the accustomed note-book:—

Johnson *loquitur:* "History presents us with few spectacles more piteous than the decadence of a powerful people enervated by luxury, and sinking beneath the weight of their own prosperity. At the dawn of civilisation man's necessities were supplied by individual exertion, and that which is gained by industry is enjoyed with zest. Luxury has now multiplied our requirements without contributing to the stock of human happiness. Sir, that man is little to be envied whose faculties were never stimulated by competion or want, and whose energies are wasted in a continuity of indulgence."

To realise the comforts of a Johnsonian tavern we must find one, and if we parade the whole length of Fleet Street disappointment will meet us at every turn until we arrive at a narrow passage dignified by the name of Wine Office Court, on the right-hand side of which stands an old hostelry known to its frequenters as "The Cheese."

The early history of "Ye Olde Cheshire Cheese" is lost in antiquity. A house with the same sign is said to have stood here prior to the Fire of London, and Shakespeare is fondly supposed to have frequented it in the intervals of rehearsals at Blackfriars, but this, as well as the equally fond legend that Charles II. resorted here in the chaste company of Nell Gwynn, must be dismissed with other conceits of the too enthusiastic essayist. Mr. Hollingshead very truly observes in a recent number of the *Pall Mall Gazette*, that it is as difficult to escape from the traditions of Nell Gwynn as the reputed hunting lodges of Queen Elizabeth, or the traces of Julius Cæsar. The present writer has made unavailing search among the topographical collections of the British Museum and Guildhall Library without finding any record of earlier date than 1725, when the house was described as "near ye Flete Prison" and "an eating-house for goodly fare." We find no mention of it in that highly curious guide to the principal London taverns, entitled "The Vade Mecum for Malt Worms," and it has even escaped the notice of "The Tavern Hunter" in his "Drunken Ramble from the Crown to the Devil," 1702, although clearly situated within his beat. This is probably due to the smallness of the establishment and the obscurity of its position.

Insignificant though it appears, as we enter the familiar narrow doorway from Wine Office Court, "The Cheshire Cheese" has probably entertained more literary celebrities than any other existing establishment in London. We are transported at once into another world. To the right is the bar, formerly, as the present writer is informed, occupied as a second dining-room, known as James's Room (the second waiter's name is always "James" by custom), and also the House of Lords, to distinguish it from the larger apartment, or House of Commons, on the left of the passage now affording the only accommodation for diners on the ground floor. The old bar was a diminutive room, not much larger than a respectable parrot's cage, now, by the removal of the inner partitions, forming a cosy corner of "the Commons." The internal fittings of this room, allowing for the alteration mentioned and the removal of a second fireplace, are as they appeared in the days of Dr. Johnson, whose favourite seat at the table in the right hand far corner is still pointed out and overhung by his portrait. This has been vouched for by old customers, one of whom in a volume of reminiscences, published in 1868, writes:—"During the fifty-five years that I have frequented the Cheshire Cheese Tavern . . . . there have been only three landlords. When I first visited the house I used to meet several very old gentlemen, who remembered Dr. Johnson nightly at 'The Cheshire Cheese.'" Mr. Cyrus Jay, the writer of these lines, was a lawyer, and the son of the Rev. William Jay, of Bath, whose "Sermons" and "Exercises" enjoyed a great reputation in their day, and are probably still to be met with in the "fourpenny box" of second-hand book shops. According to Dr. Birkbeck Hill, in later life he took to evil courses and was in the habit of "prolonging his dinner by an unbroken succession of glasses of gin and water." Elsewhere in his book he tells us that "Goldsmith sat at Johnson's left hand." In case the authority of Mr. Cyrus Jay should not be considered sufficient, having regard to his deep potations of gin and water,

there is another writer to support him. Mr. Cyrus Redding, who came to live in Gough Square hard by in 1806, states in his "Fifty Years' Recollections," published in 1858: "I often dined at 'The Cheshire Cheese.' Johnson and his friends, I was informed, used to do the same, and I was told I should see individuals who had met them there. This I found to be correct. The company was more select than in later times. Johnson had been dead about twenty years, but there were Fleet Street tradesmen who well remembered both Johnson and Goldsmith in this place of entertainment." No apology is offered for these quotations, because it is only on the evidence (unfortunately secondary evidence) of these old habitués that the Johnsonian association can be established, as Boswell is silent on the subject. Dr. Johnson is, moreover, the great presiding genius of "The Cheese," and the atmosphere of this room, except perhaps when overcharged with the seductive scents of "pudding days," is permeated, or should we say adumbrated, with Johnsonian influence.

Among other frequenters of this tavern, according to Mr. Outram Tristram, in an article contributed to the "English Illustrated Magazine," are Voltaire, Bolingbroke, Congreve, Pope, Garrick, Chatterton, and in later times Dickens, Thackeray, Douglas Jerrold, Mark Lemon, Tom Taylor, and a host of minor celebrities. It is certain that this was a favourite resort of Charles Dickens. An old frequenter of the inn, writing so recently as 1899, records that his first introduction to Dickens took place here when a boy, and that Henry Bradbury, the publisher, was in the habit of supping in the novelist's company. The reader, unless better informed, must take the greater part of this stupendous roll of names on faith. With the view of checking it as far as possible, the writer has challenged Mr. Moore, the genial proprietor in whose family the inn has remained for over half a century, to produce his vouchers. It must be confessed the result was not altogether satisfactory. "Take your own case, sir," he replied. Suppose some day you are elevated to the Bench and become a celebrity yourself like Sir Henry Hawkins, who used to come here"—the writer gasped at this fresh addition to the list—"what is there to show that you are now a frequenter?" The suggestion was so flattering it disarmed further criticism. We are almost forced to the conclusion that at some time or other every man of mark must have made this his haunt, and out of curiosity the writer is preparing a list for the next issue of this paper, containing the names of those celebrities who were *not* frequenters, and are positively known never to have entered the place.*

Our own day finds the succession continued by George Augustus Sala and the distinguished members of the Johnsonian Club, who meet here every year to celebrate the memory of their patron saint.

It has been previously mentioned that "The Cheshire Cheese" was described in 1725 as "an eating-house for goodly fare." This reputation it has steadily maintained ever since. The bill of fare is never extensive, but both viands and cookery are exceptionally good. Mark Lemon indicates the staple attractions in his—

"LINES WRITTEN AT THE CHEESE.

DEDICATED TO LOVELACE.

Champagne will not a dinner make
Nor caviare a meal
Men gluttonous and rich may take
These till they make them ill.
If I've potatoes to my chop,
And after chop have cheese,
Angels in Pond and Spiers's shops
Know no such luxuries."

The cheese referred to in these felicitous lines is usually taken toasted, and is well described by a contributor to Chambers' Journal of 2nd June, 1883, as "bubbling and blistering cheese which comes up scorching in an apparatus resembling a tin of Everton toffee in size and shape." James enumerates the dishes in rapid succession, and a wary customer will accept one of their number without dispute, bearing in mind the story told by the late Mr. Sala of a rash individual who had the audacity to ask for a hard boiled egg with his salad at a neighbouring tavern, "A hegg!" exclaimed the waiter, "if Halbert Hedward 'imself wuz to cum 'ere he couldn't 'ave a hegg." On Wednesdays and Saturdays throughout the winter it would be superfluous, if not insulting, to ask for the bill of fare, for on those days is served the celebrated pudding endeared to all frequenters of The Cheese, and of such rich and rare ingredients that some of its customers in an ecstasy of appreciation have been known to burst into song. The receipe of this dish has been handed down from generation to generation of landlords, and is said to be kept under lock and key in a safe. William, a former head waiter, was never seen to such advantage as on "pudding days." We are told he used to consider it his duty to go round the tables insisting that the guests should have second, third and even fourth helpings. "Any gentleman say '*pudden*'?" was his usual form of invitation, provoking on one occasion a retort the point of which was entirely lost on him, "No *gentleman* says pudden."

The portrait of his predecessor, Henry Todd, familiarly known as "Old Harry," whose career as a waiter at "The Cheese" commenced in 1812, still hangs on the time-honoured wainscot of the dining-room. It was painted by Wageman in 1827, at the instance of some old customers, and presented as an heirloom to the inn. He is represented in the act of uncorking a bottle of wine, and the gentleman seated at the table, for whom this office is being performed, was doubtless a well-known habitué of the period. A contemporary has left it on record that "Old Harry" was not gifted with the sweetest of tempers, and it is probably to him that the following parody, quoted by Mr. Percy Fitzgerald in "Picturesque London," has a sly reference:—

"Waiter at the 'Cheshire Cheese,'
Uncertain, gruff, and hard to please,
When 'tuppence' smooths thy angry brow,
A ministering angel thou!"

* EDITOR'S NOTE.—No, no. Our readers will have had enough of cheese and pudding to last them a lifetime.

With this brief tribute to the memory of its departed servitors, the writer, mindful of certain hints already received, is reluctantly compelled to take leave of "Ye Olde Cheshire Cheese," but those readers who are not already frequenters and whose curiosity is aroused, will find it no uncongenial task to collect further traditions for themselves on "pudding days."

H. L.

Letters from a far-off Country.

[We have received a packet of letters, in various handwritings and addressed to various persons; all, however, having the common characteristic of being unfranked. The covering note printed immediately below may doubtless be considered in some extent as explanatory. The name of the writer, however, does not appear in the present Medical Register, although present in various issues previous to 1897. An obituary notice which appeared in the *Lancet* towards the latter part of 1897 may possibly be held as sufficient excuse for the omission. When our correspondent commits to us this bundle of letters he can hardly imagine that we are prepared to undertake the duties of a forwarding agency on behalf of persons who have no claim whatever on our services. The small matter that he is indebted to us for several years' subscriptions does not, we need hardly say, influence us in any way. We feel that by printing one or two of these letters we shall be doing the utmost that *can be expected*.—ED. G. H. G.]

To the Editor of GUY'S HOSPITAL GAZETTE.

DEAR SIR,—I will not waste your time by an account of my discoveries in metaphysics since I left the company of my fellows for "that undiscovered country from whose bourn no traveller returns." I hardly think that your readers are of sufficient intelligence to appreciate the full importance of the work and discoveries which have occupied my mind. Of this I am certain, that they can never realize, while in their present condition, the advantages which I, I alone, have conferred upon those who, to use one of your expressions have ceased to live. A mind such as mine must necessarily move in a plane far above that in which you and your compeers are compelled to vegetate. Huxley, only a fortnight ago, said . . . . (here the writer indulges in two pages of self-glorification.—ED.) . . . briefly, let me acquaint you with one direction in which my discoveries have led. The art of writing, on palpable materials, is no longer the prescriptive right of the living. I, I alone, have given to my fellows the power to put down thoughts, wishes, nay, even commands, and to transmit them to those who have not as yet enjoyed the solution of corporeal entity. But, I confess, for the present even I have not yet succeeded in commanding the ready obedience of the cumbersome machinery of your post-office. To you I delegate this office. You shall have the great honour of acting as our intermediary with your Postal Authorities. I am aware, even after this lapse of time, such is the power of my mental faculties that a few trifling pence are owing you from me as subscription to your paper. I had always considered your journal to be below monetary recompense and had suffered its continued address to myself merely through sheer good nature. I shall not however let that stand in the way of this, our object, and I give you freely the right and permission to forward these letters of my friends—acquaintances perhaps would be a better description—to their destinations.—I am, sir, yours truly, ———

To ———, ESQ., M.D., F.R.C.P. Lond.

MY DEAR SIR,—I don't suppose that you have the remotest idea who I am or why I am writing you. Even when you turn to my signature at the end of this letter, and I know that you will do that long before you have read me through, you will be none the wiser. If however you turn up my name in your case book or whatever you call it, you will at once remember me as the fool who paid you a very fat fee for an entirely inadequate opinion. As far as I was concerned I did not want your opinion nor any other man's on my condition. It was quite bad enough to have poor old X. pottering round me twice and three times a day, coughing in that self-deprecating way that always made me particularly irritable, and worrying the nurse, who was a woman of considerable common sense, with his idiotic suggestions. But my people, out of mistaken kindness, thought that I should not be allowed to die without some advice from a Specialist, and accordingly hinted the same to old X. He didn't seem a bit annoyed, although he must have considered himself as capable as any man—to judge by his bills—and might have resented outside competition. I should, I know. That he didn't have any forcible objections you know well enough and so does your banking account. When I consider what you did for your money I can't help feeling genuine admiration for your colossal cheek. I remember when he mentioned your name he said you were a "Physician to Saint . . 's Hospital" and if I had connected that fact with my recollections of that hospital as a begging concern of wonderful effrontery, I might have expected some such demand as you made upon my purse. I was a business man—you may not have known that—and as a business man I expected something for my money. You know better than any whether I got it. Yet I will admit that you impressed me when first you came. The obvious respect that poor old X. paid you; the deference with which he listened to your platitudes and the painful embarassment with which he offered a slightly different opinion on an unimportant trifle, all tended to breed a sort of respect for you. But now that I can look at you with a different pair of eyes—for you must know that we share as common knowledge all that you special people keep treasured up in your funny little souls—I can see what a hopeless condition you were in. I believe, but am not yet sure that poor old X. was rather sick with

you. You did not seem to come up to his ideals of a Physician of Saint . . . 's; by the way, why St. . . . 's? I met . . . . the other day—we don't call them "saint" down here; we drop all titles—and, happening to mention your hospital, I found that it was a very sore point with him. He said that he had never had a day's illness in his life and had always barred hospitals and physicians like poison, yet now that he had changed his abode, they go and call a wretched place full of rotters after him. He said it was playing it very low down indeed. He was very hurt about it and inclined to express himself rather more forcibly than politely. You might make a note of it if they think of re-naming your place. . . . . is a very decent chap and I should like to do him a good turn. Let me see, where was I? Oh! I know. Yes, you did not play up to the part enough for old X. I think it was at your fourth visit that I learnt how you appreciated that old port of mine. You must have been a bit of a terror as a student if one can judge by your maturer powers. I wish you had confined yourself to the whisky, though, for that port was something one cannot buy every day nor every century for that matter. Why, it used to be almost a religious rite when a bottle was opened. Watson used to take the little key that I always kept as if he had been some old priest receiving a votive offering, THE port! well, you certainly appreciated it. Do you remember the post-mortem examination that you made of me? You looked a bit surprised when you saw the man turning out my machinery. It was very thoughtful of old X. to invite you to the show; I don't think you would have turned up if you had quite realised what an ass you had made of yourself. I nearly had a fit with laughing when I saw poor old X.'s face. The look of mild reproach was too funny for anything. Of course you tried to play a game of bluff but I will do old X. the justice of saying that he did not swallow it in the least. And the cream of the thing was that he was not so very far off the lines, while you were hopelessly out of it. Now, candidly, do you think that you earn your money? I know that you have got all sorts of degrees and diplomas, with and without honours and that you have got nearly a column in the directory. But putting aside all that stuff, do you not think that you are just a little bit of a fraud? I have met a fair number of your patients down here . . . Just think it over and let me have your opinion. I am afraid there is no fee!—Faithfully yours, ———

List of Books recently added to the Hospital Library.

PRESENTATIONS.

Messrs. Longmans, Green & Co.—
Ashby's Notes on Physiology.
Bennett's Simple Fractures.
Celli's Malaria.
Cheyne & Burghard's Surgical Treatment.
Curtis' Practical Bacteriology.
Goodsall & Miles' Diseases of the Anus and Rectum.

Messrs. MacLehose & Sons—
Barr's Diseases of the Ear, third edition.

Messrs. Macmillan & Co.—
Allchin's Medicine, three vols.
Stonham's Surgery.

John Murray—
Newman's Bacteriology.

Young J. Pentland—
Gibson's Medicine.

The Rebman Publishing Company—
Lake's Laryngeal Phthisis.
Sutton & Giles' Diseases of Women.
Thorington's Refraction.

Messrs. Saunders & Co.—
Da Costa's Surgery.
Garrigue's Diseases of Women.
Hyde Montgomery's syphilis.

Messrs. Smith, Elder & Co.
Cheadle's Cirrhosis of the Liver.
Keetley's Orthopædic Surgery.

Messrs. John Wright & Co.
Carwardine's Practical Surgery.

All new works presented by the publishers are kept in a special bookcase, conveniently placed for anyone desiring to inspect them.

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The Dental Section of the Library includes the following works:—

Barrett's Dental Surgery.
Black's Dental Anatomy.
Bloxam's Metallurgy.
Bödecker's Anatomy and Pathology of the Teeth.
Cole's Oral Deformities.
Coleman's Dental Surgery.
Colyer's Extraction of the Teeth.
Colyer's Irregularities of the Teeth.
Essig's Prosthetic Dentistry.
Evan's Crown, Bar, and Bridge Work.
Flagg's Plastics.
Fletcher's Metallurgy.
Harris' Principles of Dental Surgery.
Heath's Injuries and Diseases of the Jaws.
Hewitt's Nitrous Oxide and Ether.
Kingsley's Oral Deformities.
Kirk's Mechanical Dentistry.
Makin's Metallurgy.
Miller's Micro-Organisms of the Human Mouth.
Ottenlengui's Methods of Filling Teeth.
Owen's Odontography.
Pearsall's Mechanical Dentistry.
Pedley's (Denison) Diseases of Children's Teeth.
Quinby's Notes on Dental Practice.
Rymer's Note-book for Dental Students.
Salter's Dental Surgery.
Sewill's Dental Surgery.
Sewill's Dental Caries.
Smith's Dental Metallurgy.
Smith's (Hopewell) Dental Microscopy.
Smale & Colyer's Diseases and Injuries of the Teeth.
Silk's Anæsthetics.
Stocken's Dental Materia Medica.
Tomes' Dental Anatomy.
Tomes' Dental Surgery.

In Lighter Vein.

THE trees in the park are almost leafless; already we have had one severe attack of atmospheric jaundice. The wind, rushing through the colonnade, bites like a set of new false teeth. Groups of expectant dressers huddle together for warmth, and softly curse the unpunctuality of the Staff. Fringes are unfringed. (ED. Steady, steady).

With this accumulation of depressants, what means the half-smile that lurks in every face, the twinkle that trembles in every eye? Why, there is—hold on to something if you don't feel strong—there is going to be a DANCE.

The spirit of the ball-room pervades the whole hospital. The Staff no longer walk, they dance round the wards, valse down the colonnade, polka down the steps to their carriages. The dresser no longer asks the nurse if he may have, say, No. 13's dressings, he says, "May I have the pleasure of No. 13"? The sisters eagerly discuss the relative merits of chiffon and crèpe-de-chine; whilst amongst the males of the community party feeling runs high—even blows have been exchanged—as to whether white waistcoats are indicated. Many of us are trying to solve the problem, "How to get those dress clothes out!"

The great feature of the evening will be the first set of Lancers. For it is officially announced that, in it, every house-surgeon or physician, as the case may be, will dance with the sister of his ward. (ED. I have heard nothing of this).

A prominent member of the Staff has been heard assiduously practising *small talk* on his assistants, with such remarks as "How well you're looking!" "Any news?" "Lovely weather, isn't it?" etc., etc.

May I add for the benefit of any person or persons, wishing to emulate the example of this great man, that a course of lessons in this fascinating art, at an inclusive fee, will shortly be given by

THE BIRD OF PREY.

THE H.-P. AND THE CLINICAL.

(With apologies to Lewis Carroll).

The H.-P. and the Clinical were walking in the park,
They wept like anything to see the keen and earnest clerk,
"Suppose we turn the gas right off and leave him in the dark?"

"This opening of Clinical," the H.-P. said, "is wrong,
There's not a place now left us free from all the vulgar throng;
Do you suppose, fair Clinical, the rule can last for long?"

"If forty men with forty tongues, cackled for half-a-year,
Do you suppose," the H.-P. said, "the Dean would lend an ear?"
"I doubt it," said the Clinical, and shed a bitter tear.

"I cannot see what they can find of interest in there,
They only see our treatment, sometimes curious and rare,
And ask us awkward questions which I do not think is fair."

"When you are at the Colleges," the H.-P. said with pride,
"They make you use a stethoscope and say what's wrong inside;
They won't expect the dose of cacodylic aldehyde.

But if you do a locum for a G.P. down at Bow,
You'll find that this is just the thing it pays for you to know;
I'm certain on this point for the GAZETTE has told me so.

Or if you are a resident, a Resident, like me,
Accustomed to the use of scientific pharmacy,
You'll realise the value then of Clinical—for tea.

I prophesy in future that the post will go quite cheap,"
* * * * * *
But the Clinical made answer none for he was fast asleep.

THE BALLAD MONGER.

Appointments.

CIVIL.

WHITTINGTON, C. E., L.S.A., M.R.C.S., has been appointed Certifying Surgeon under the Factory Acts for the Tuxford District of Notts.

NAVAL.

Surgeon MURRAY P. JONES, R.N., has been appointed to the *Wildfire*.

Reviews.

The price of books submitted for review should in every case be stated.

Surgical Diseases of the Kidney and Ureter. By Henry Morris, M.B. Lond., F.R.C.S., Vice-President of Royal College of Surgeons, Surgeon to Middlesex Hospital, etc. In two vols., 1,372 pp. Price 32s. (Cassell & Co.)

Long since have we learnt to recognise the great value of works by Mr. Henry Morris, and the present one is no exception, destined to rank with the highest of surgical literature. The two volumes are the offspring of Mr. Morris' previous manual on Surgical Diseases of the Kidney, but the pronounced advance in renal surgery of the past twenty years has necessitated an almost complete re-writing, whilst the work on the ureter is entirely new. That the work is so largely based on the author's vast personal experience, as well as a close study of the writings of others, does but considerably enhance its value.

The first volume opens with an account of the anatomical relations of the kidney, in which perirenal fascia is described as of two thin layers enclosing the kidney, its capsule, and the circumrenal fat, joined above and to the outerside of each organ, but open along the inner border and below, thus explaining the movements of the kidney, downwards and inwards, and how it is that inflammations of the cellular tissue of the pelvis can ascend along the ureter by continuity to the cellulo-fatty tissue around the kidney. The abnormalities of the kidney, as regards position, form and number, are dealt upon in length, and in the treatment of injuries of the organ, the importance of gauze packing of a rupture is emphasized, together with removal of any detached portions, complete nephrectomy being advised only for severe hæmorrhage or extensive laceration. The much-vexed question of urinary fever is discussed, and Mr. Morris maintains that a large number depend upon septic infection, though it is probable that in some the nervous element plays a part; treatment by means of quinine, morphia and diaphoresis has been most efficacious in the author's hands for transient and recurrent paroxysmal forms of the attack. The chapters on hydronephrosis, renal tumours, and calculus are full of good points, especially with regard to diagnosis and treatment. The necessity for a free incision into the kidney substance, or into its pelvis, in operating for calculus is insisted upon in place of needling, and in all cases, it is advised to catheterise the ureter from above to the bladder. On the question of diagnosis of calculus by the Röntgen rays, Mr. Morris owns to disappointment. Though in many cases the rays have demonstrated the presence of stone, yet "the fact remains that skilful and experienced manipulators have obtained shadows supposed to be due to stones, even of large size, where no stone has existed; and, on the other hand, have failed to obtain shadows of really existing stones." On more than one occasion, Mr. Morris has failed to find a stone depicted on a radiograph.

The author is an advocate of partial nephrectomy in tubercular disease of the kidney, and holds out great promises for this operation in early cases. Of seven cases in which it was done, three subsequently required complete removal of the organ, whilst other four were known to be well after a considerable interval. One of these cases had previously had one kidney removed before Mr. Morris resected one third of the remaining, and four years after was engaged in domestic service and in good health.

A large portion of the second volume is taken up with diseases of the ureter, and the various surgical measures by which the latter can be grafted into the fundus of the bladder, into the bowel (as in Mayal's successful case), or brought to the skin, are fully described. That catheterisation of the ureters has been too frequently advised, and of its dangers, the author is assured, especially with concomitant vesical disease.

The whole work is written with Mr. Morris' well-known lucid style, is well illustrated from specimens in various museums, and many cases typical of the particular disease are given from the author's personal experience. We feel convinced that no book in the English language on this subject has previously reached such excellence.

Clinical Pathology and Practical Morbid Histology. By T. Strangeways Pigg, M.A. (Strangeways & Sons). 5s. net.

This is the second edition of the above book. In it the author gives all the well-tested and reliable methods for making pathological specimens and examinations of the blood, sputum, urine, ringworm, etc. Full details for hardening and fixing tissues and embedding in paraffin or celloidin are given. Various microtomes are described and different methods of staining the sections. The book is beautifully clear and simple, each individual step being given in a separate and numbered sentence. For example:—

EXAMINATION OF HAIRS FOR RINGWORM.

A MACERATION WITH CAUSTIC POTASH.

1. Remove a number of hairs, and soak them in ether for a few minutes in a watch-glass.

2. Then fix them on a clean glass slide with a little melted paraffin, which must not be applied to the roots.

3. Now pour a few drops of 10 per cent. caustic potash upon the hairs, and allow them to macerate for some minutes.

4. Remove the caustic potash carefully with blotting-paper and wash the hairs with water.

5. Remove the water with blotting-paper and then mount in Farrant's solution.

6. Examine with ordinary high power for mycelial threads and spores.

The author lays great stress on methodical work. "Good technic," he says, "alone makes a method

useful, and a valuable method is often rejected as useless owing to bad technic."

The book is interleaved, and so gives the student an opportunity of adding notes on his own results, or making sketches of his preparations. It is also illustrated by numerous diagrams. Altogether it should prove a most useful little book in the laboratory.

Gray's Anatomy. (Longmans & Co.) 32s. nett.

The fifteenth edition of "Gray" has just been published, and it contains several improvements. The whole of the work has been revised, but as far as we can judge, the section on Embryology is the one that has undergone the chief alteration. This subject is always a difficult one for the student, and is one, perhaps, in which good illustrations are of more value than in any other. The older editions of Gray did not contain a very lucid description of development; but the present, although longer, is much better, and is particularly valuable on account of the numerous diagrams which have been borrowed from the works of eminent embryologists.

The quality of the paper has been improved, and consequently the illustrations are better. The section on Osteology, one of the most read in the book, contains some new pictures of the more complex bones, such as the cranial and pelvic, which are well shaded and give a much better idea of the real than did the old outline illustrations.

Gray has held a prominent place for a very long time amongst treatises on anatomy, and from its general excellence will continue to do so.

If we might suggest an alteration, it would be to have the present bulky book divided into more portable volumes.

Lessons on Massage. By Margaret D. Palmer. (Baillière, Tindall & Cox.) 7s. 6d.

The art of massage is of very ancient standing, as Miss Palmer points out, having been known to have curative value by the Chinese in 3000 B.C. As there has been a revival of massage in these days, we are glad to be able to recommend a good book on the subject to our readers. The authoress is manager of the Massage Department at the London Hospital, and therefore her teaching should be founded on wide experience.

The first part of the book is devoted to an explanation of the various modes of massage, and we regret that Miss Palmer should have adopted the multiple and elaborate terms, against which Dr. Playfair—one of the founders of modern massage—recently uttered a protest. This is followed by a description of the anatomy and physiology of the different parts of the body, and a few notes on the forms of massage most suited to each particular region. The teaching is thorough and the authoress evidently wishes her readers to be scientific masseuses.

We note with pleasure that Miss Palmer relegates massage to its proper position, namely, to be a handmaiden to the science and art of medicine, for, throughout the book, she constantly warns the masseuses to closely note the doctor's orders, and to carefully follow them out.

The book is well printed and bound, and the illustrations are good and numerous.

Sport.

Rugby Football.

GUY'S v. RACING CLUB DE FRANCE.

This match was played at the Parc au Princes, Auteuil, Paris, on October 27th. The teams appeared on the field at 4.30, and were loudly cheered by the spectators. Guy's kicked off, the ball was badly returned, and play settled down in the French twenty-five. It was soon evident that the Guy's pack were the better in the scrums, getting the ball out to the backs time after time, but the tackling of the opposite backs was keen and sure, each man going low and bringing his opponent down every time, so that little ground was gained. Guy's soon began to press, and from a good bout of passing Brown was just collared on the line. The Racing Club worked the ball back to half-way, but Guy's again began to attack, and Brown, gathering the ball well, raced in fairly wide out. The attempt at goal failed. Play of a mediocre character ensued, in which neither side showed to much advantage. M. Reichel, following up a kick, got the ball and looked a certain scorer, when he was overtaken and well grounded by McEvedy. Half-time was called, with Guy's 3 points, Racing Club nil.

Night was falling fast when the second half commenced. The French forwards broke away from the line-out, and Roosevelt scored an easy try; the kick was unsuccessful. Guy's now began to play up and pressed hard. From the line-out the ball was passed to the halves, who transferred to the three-quarters, and Brown grounded the ball between the posts. O'Brien added the major points.

Meanwhile the moon had risen on the far corner of the ground, and as it was practically impossible to see the ball, time was called, with the result—Guy's, 1 goal 1 try (8 points); Racing Club, 1 try (3 points).

A feature of the game was the keen and certain tackling of the Frenchmen. The teams dined together in the evening. Team:—

GUY'S.—E. M. Harrison (back); A. Brown, A. B. O'Brien, P. F. McEvedy, C. King (three-quarter-backs); M. C. Wetherell, M. G. Louisson (half-backs); R. C. Lawry, A. H. E. Wall, B. Glendining, R. G. Anderson, E. H. B. Milsom, E. L. Ward, T. B. Layton, S. H. Cross (forwards).

REMARKS.—Harrison, at back, was sound. The backs were inclined to run across the field, and consequently gave the wing-man little room. The forwards outclassed

their opponents in dribbling and on the line-out, but showed a slight lack of keenness, especially when the opposing men were lying on the ball.

GUY'S v. ROSSLYN PARK.

Played at Old Deer Park on Saturday, November 2nd. The absence of O'Brien and Orpen necessitated a re-arrangement of our three-quarter line, McEvedy and Louisson going on the centre, and Alcock taking McEvedy's place on the wing.

In the first half Guy's had much the best of the game, the forwards heeled well, and the backs brought off several good bouts of passing, and Alcock and Morgan made several good attempts at scoring, the former in particular being with difficulty held up on more than one occasion. After about twenty minutes' play a bad mistake by the Rosslyn Park full back let in Thomas, who scored a good try, Morgan converting.

Keeping up the pressure Guy's returned to the attack with great vigour, and after some good combination among the three-quarters, Morgan scored the second try which he failed to convert. Half-time was now called with Guy's 8 points to the good.

For some time after re-starting Guy's again pressed, but the forwards fell off a good deal in their play, and Rosslyn Park began to press and two strong attacks on the Guy's lines resulted in tries being scored by G. Bailey and Pooley, the latter player converting in each instance. In the last few minutes of the game Guy's made great efforts to score, but strong defence by the Rosslyn Park backs kept them out, and the game terminated in a very lucky win for the Park by 10 points to 8. Team:—

GUY'S.—E. M. Harrison (back); E. Morgan, P. F. McEvedy, M. G. Louisson, F. Alcock (three-quarter backs); M. C. Wetherell, O. V. Payne (half-backs); H. A. Cutler (captain), A. H. E. Wall, K. V. Trubshaw, R. G. Anderson, T. P. Thomas, B. Glendining, E. H. B. Milsom, A. R. Thompson (forwards).

REMARKS.—The forwards shewed great improvement, both in packing and heeling, although towards the end, several members displayed a tendency to winging, and consequently the remainder were frequently rushed. The halves both played a good game, although perhaps a trifle slow at times in getting the ball out to their three-quarters. The three-quarter line suffered in consequence of its re-arrangement, but were distinctly unlucky in having two apparent tries disallowed, and in defence should tackle harder, and at the same time not wait for the opposing three-quarters to pass, but to "go for the man with the ball." Harrison kicked well, but should try to find touch more often.

GUY'S 2ND XV. v. SHANDON ATHLETIC.

This match was played at Honor Oak on Saturday, October 26th. Guy's had out a moderate team, and losing the toss defended the Pavilion goal. We had to act on the defensive for some time, as our passing made little headway against our opponent's hard tackling. Half-way through the first half, from a "scrum" in our twenty-five, the opposing half got away and transferring almost on the line, O'Grady scored a try which was not converted. In the second half Guy's played better, but tried too much passing instead of dribbling. No scoring took place, so that Shandon Athletic won by 1 try to nil.

Association Football.

GUY'S v. WEST NORWOOD.

SURREY SENIOR CUP.—FIRST ROUND.

Played on October 26th, at High View Park, Norwood. Owing to fog and late trains, Guy's started with only six men, and played so for ten minutes. During this time, by hard play, they managed to prevent their opponents scoring, and on one or two occasions were even dangerous. When the late-comers did arrive the team failed to settle down, and consequently West Norwood had matters their own way, and scored twice before the interval by means of good play on the left wing.

The play during the second half was more even, but West Norwood had the best of the scoring, obtaining three points to one, which was scored by Barber off a centre of Wilson's. Team:—

GUY'S.—F. M. V. Smith (goal); H. B. Germain, A. R. Wilson (backs); H. Bacon, A. Denning, J. Cameron (half-backs); E. Wragge, H. Barber, E. Litchfield, and T. F. Wilson (forwards).

REMARKS.—The team failed to come up to expectations, and gave but a very moderate display of football. The forwards lacked combination and dash, their attempts being easily broken up by the opposing halves. The halves worked hard, but their efforts were of small value. The backs seemed to be handicapped by the halves, but in the second half they both put in a lot of useful work. Smith, in goal, saved well on one or two occasions, but he fails to clear his goal.

West Norwood are a well-balanced team, and are the fortunate possessors of a very good left wing. They should do well in their future Cup ties.

GUY'S v. ROYAL COLLEGE OF SCIENCE.

This match was played at Honor Oak Park in a high wind on Wednesday, October 30th, the hospital winning by 3–1. Playing against the wind in the first-half we scored one goal through Chignell. In the second half Chignell again scored, and Wilson put in a good shot from the left wing which beat the goal keeper. Their forwards broke through in the second half and scored, but as neither side was able to again score the game ended as above stated. The team as a whole played rather poorly. Collins in goal played well, and Foster at centre half shewed good form in the first half, but very little combination was seen from the forwards. Team:—

E. H. Collins (goal); T. Edey, H. D. Crofts (backs); J. Bookless, A. L. Foster, P. Pedrick (half-backs); E. Wragg, T. A. Chignell, P. C. Litchfield, E. L. Norton, J. F. Wilson (forwards).

GUY'S v. WEYBRIDGE.

This match was played at Weybridge, in ideal weather, on Saturday, November 2nd, and after a good game ended in a draw of 2 goals all. Guy's had by far the greater part of the play during the first half, and were constantly attacking their opponents' goal, but owing to eratic shooting did not score during the first quarter of an hour. After this Barber dribbled through and scored with a good shot, and as a result of some good passing by the forwards he again passed the backs, and beating the goal keeper added a second shortly before half-time. After crossing over Weybridge became much more agressive, and the play of a more even nature. From a well-placed corner they at length scored. Several times after this Guy's nearly scored, but nothing more was added till close upon time, when from a miskick they obtained another goal, and so the game ended in a draw.

Our defence was doubtless the feature of the team, Collins in goal saving very well, while the backs, German and Edey, played a sound game. The halves were good, the tackling of Denning, the right half, being especially noticeable. The forwards played better and shewed more combination than in previous matches, and the two goals by Barber were well scored. Team :—

E. A. Collins (goal) ; H. B. German, T. Edey (backs) ; A. F. Denning, J. Goss, H. Bacon (half-backs) ; E. Wragg, S. H. Barlow, H. Barber (captain), E. L. Norton, P. A. Peall (forwards).

GUY'S 2ND XI. v. ROYAL COLLEGE OF SCIENCE 2ND XI.

This match was played at Shepherds' Bush on October 30th. Guy's, playing with the wind, scored eight goals in the first half. Three more were added in the second half. Our opponents failed to score, and a one sided game ended in a win for Guy's by eleven goals to nil.

Goals were scored by Barlow (4), Peall (2), Stewart (2), Clough (2), Messent (1). Martin played a good game at half. The forwards played a good combined game. Stewart, Barlow and Peall were the best of them. Team :—

GUY'S.—H. Turner (goal) ; J. Houchin and A. Roome (backs) ; R. Franklin, F. M. V. Smith, H. Martin (halves) ; A. H. Clough, G. Barlow, B. H. Stewart, R. Messent and P. A. Peall (forwards).

GUY'S 2ND XV. v. BOROUGH ROAD COLLEGE.

This match was played at Isleworth on November 2nd. From a variety of causes many regular members of the team found themselves unable to turn out, and we suffered defeat by no fewer than 35 points to nil. The feeble character of our defence is sufficiently indicated by the score. The tackling was almost invariably high. With one or two exceptions our forwards seemed quite unable to keep going at the pace set by our opponents. We would remark that the lack of enthusiasm displayed at this stage of the season renders the task of those responsible for turning out a fifteen a thankless one indeed. If the 2nd XV. is to maintain at all worthily the traditions of past years, its members have need to combine considerably greater keenness than is shown at present with systematic training.

From the Gazette's Special Pathologist.

X.Y.Z., HASTINGS.—No tubercle bacilli were found in this specimen.

H., RAMSGATE.—Reaction amphoteric, sp. gr. 1015, albumen a minute trace, blood absent, sugar absent, urea 1·43 per cent. or 28·43 grammes per diem. *Microscopical examination of the centrifugalised deposit.*—The deposit was small in amount. It consisted of vaginal squamous epithelium, together with numerous ordinary putrefactive bacteria. Nothing of pathological significance was found. The total solid matter calculated according to Hæser's formula was 69·48 grammes in the twenty-four hours' urine. (*Specimen marked Patient No. 1.*)

H.V.R., FORDINGBRIDGE.—This sputum contained a fair number of tubercle bacilli, generally in small clumps.

T.D.L., WOOLWICH.—The urine contained a fair amount of albumen, and in the deposit, which was small in amount, a large number of hyaline coarsely granular and colloid casts were found, there was only a trace of blood, and no appreciable excess of leucocytes. Epithelial cells were present in fair numbers, they were probably chiefly of prostatic and renal origin. No evidence of new growth could be obtained. NOTE.—It is rarely possible to diagnose new growth from an examination of the urine. (*Specimen marked B.*)

J.J.C., BRIDLINGTON.—The blood serum tube was inoculated from the piece of membrane, and after incubation a practically pure culture of the Klebs-Loffler bacillus was obtained. PATHOLOGIST.

Birth.

LEVICK.—On October 16th, at Havant, to the wife of George Levick, a son.

Deaths.

DUNCALFE.—On October 20th, at Droitwich, Henry Duncalfe, M.R.C.S., L.S.A., of Sutton Coldfield, in his 73rd year.

HALLILAY.—On October 21st, at Moorland Road, Leeds, John Hallilay, L.R.Q.C.P., M.R.C.S. Eng.

HOLDING.—On October 17th, at East Hendred Rectory, the residence of his son-in-law, Charles Holding, F.R.C.S., late of Victoria Street, Westminster, aged 93 years and 9 months.

KENDALL.—On October 24th, at Helston, Cornwall, Bernard Charles Kendall, L.R.C.P. Lond., M.R.C.S., in his 35th year.

ED.—D. G. G.

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Notice.

All Communications, Articles, Letters, Notices, and Books for Review should be forwarded, accompanied by the name of the sender, to the Editor, Guy's Hospital Gazette, *Guy's Hospital, S.E.*

Any of our Subscribers who may be desirous of having their numbers of the Gazette *bound should leave them with the Librarian.*

The annual Subscription to the Gazette *is* 6s. 6d.; *post free,* 7s. 6d. *All financial communications, as well as subscriptions, should be sent to the Financial Editor,* Mr. C. H. Wells, Secretary's Office, Guy's Hospital.

The charge for binding in blue, with the Arms of the Hospital in gold will be One Shilling and Sixpence.

Calendar of Coming Events.

November, 1901.

Sat. 23.—Messrs. Lucas and Lane's take-in; Drs., B. Glendining and H. S. Brown; Cl., A. C. H. Gray.
1 p.m., Clinical lecture by Dr. Washbourn.
G.H.R.F.C., I., Old Merchant Taylors, away.
II., Old Merchant Taylors II., home.
III., Polytechnic "A," away.
G.H.A.F.C. I., Reigate Priory, away.
II., Balham Wanderers, home.
G.H.P.P.S., Pathological evening.

Mon. 25.—1.15 p.m., Clinical lecture by Mr. Targett.

Wed. 27.—1.30 p.m., Clinical lecture by Mr. Howse.
G.H.R.F.C., III., Dulwich College II., away.
G.H.A.F.C., II., Sevenoaks, away.

Thur. 28.—Mr. Golding-Bird's take-in; Drs., J. H. Donald and E. G. Goldie; Cl., E. I. Claxton.
G.H.C.U., Address by W. Hind Smith, Esq.

Fri. 29.—Last day for sending in names for 1st, 2nd and 3rd M.B. Camb. Exams.

Sat. 30.—1 p.m., Clinical lecture by Dr. Washbourn.
Smoking Concert in Dining Hall, 8 p.m.
G.H.R.F.C., I. (with St. Thomas's) v. Blackheath, away.
II., St. Mary's College II., home.
III., Wasps III., away.
G.H.A.F.C., I., Beckenham, away.
II., Beckenham 2nd XI., home.

December.

Mon. 2.—1.15 p.m., Clinical lecture by Mr. Higgens.
January Appointment List opened.
Examinations for M.D. and M.S. Lond. begin.

Tues. 3.—Examination for B.S. Lond. begins.
Last day for sending in Fees and Certificates for 1st, 2nd and 3rd M.B. Camb. Exams.
12 noon, Mr. Rowell's Demonstration on Anæsthetics.

Wed. 4.—1.30 p.m., Clinical lecture by Mr. Howse.
G.H.R.F.C. III., Blackheath School, away.
G.H.A.F.C. I., Old Carthusians, home.

Fri. 6.—January Appointment List closed.

Sat. 7.—1 p.m., Clinical lecture by Dr. Washbourn.
G.H.R.F.C., I., Northampton, away.
II., Croydon II., home.
III., Old Charletans "A," away.
G.H.A.F.C., I., Old Foresters, home.
II., Reigate Priory 2nd XI., away.

Guy's Hospital Gazette,

NOVEMBER 23, 1901.

The Hospital Appeal.

To the Editor of Guy's Hospital Gazette.

Sir,—May I, as treasurer, ask for space in your columns to call public attention to the appeal now issued by Guy's Hospital for a Renovation and Building Fund?

The necessity for the work of renovation and extension in respect of which we are asking for £180,000 becomes apparent when it is remembered that Guy's Hospital was founded early in the 18th century, and, as a matter of fact, good progress has already been effected in those directions in which the task of repair and reconstruction could no longer be postponed.

It will be satisfactory to your readers to learn that the works now in progress and in contemplation have been cordially approved by the

medical and surgical staff, whose promised subscriptions already amount to close upon £2,000. Having regard to the magnitude of the scheme, it is almost superfluous for me to add that the expense of carrying it out could not possibly be met from the ordinary income of the hospital, nor is it within the purpose of the Prince of Wales's Hospital Fund for London to help in meeting such a capital requirement. The council of that fund, in accordance with the wise policy consistently pursued by them, has for some years past made generous grants towards the expenses attending the re-opening of closed beds in the various metropolitan hospitals; but, even with this assistance, the published figures disclose that Guy's requires a further £14,000 per annum in respect of maintenance over and above our present sources of income. Indeed, the undertaking to re-open closed beds has involved us in further capital outlay, and it is largely to meet the heavy expenses of providing increased accommodation for the nursing staff, proper sanitary blocks in connection with the wards, and a more extensive and adequate laundry, that the present appeal is being made.

In the administration of a great public institution it must be recognized that to stand still is impossible. Pace must be kept with the rapid progress of the art of healing, and through good times and bad times alike the great general hospitals are expected by the public to be adequate and completely equipped, to meet the increasing claims of human suffering.

Guy's Hospital, the foundation of a London citizen, situated within a stone's throw of London Bridge, at the very centre of the mercantile portion of the metropolis, has a special claim for practical sympathy from the county of London, and indeed from every locality from which its patients come; but the claim is even wider when it is remembered that Guy's doctors and nurses go all over the world, bearing for the benefit of humanity the knowledge and skill acquired within its walls.

You have already been good enough to announce that the Lord Mayor will preside at a Mansion House meeting on January 15th next in support of the appeal. Mr. J. Pierpont Morgan has promised a donation of £5,000 to the Renovation and Building Fund when £100,000 has been reached, and the Governors are anxious to achieve this by the date of the meeting.

May I add, what I think will encourage many to respond the more readily, that in giving to Guy's Hospital they are assisting a world-renowned institution which, in spite of the up-hill financial battle waged since 1884, is doing to-day a vaster work, and doing it more effectively, than in any previous period of its long and honourable history?

I am, Sir, your obedient servant,

H. COSMO O. BONSOR,
Guy's Hospital, Nov. 12. Treasurer.

The following is the text of the appeal to which Mr. Bonsor refers:—

APPEAL FOR £180,000 TOWARDS A RENOVATION AND BUILDING FUND, AND FOR THE RAISING OF THE ORDINARY INCOME OF THE HOSPITAL TO £60,000 PER ANNUM.

Six years have now elapsed since his Majesty the King, then Prince of Wales, lent his powerful aid to the Governors of Guy's Hospital in a strenuous appeal for a sum of £500,000 wherewith to re-endow the hospital, and to restore its finances to the condition in which they were before those times of agricultural depression which have so seriously crippled the resources of all charities deriving their income from landed property in the country. The response to that appeal was very generous indeed, but inadequate to the needs of the case. As a result £250,000 has been paid into the re-endowment fund, and that fund, as well as the sustentation fund for general maintenance, will remain open until the deficiency in ordinary income has been made good.

Over and above the necessity for a large increase in ordinary income to meet the annual deficiency shown in the appended figures, the Governors, with the full approval of his Royal Highness the President, have now to make an immediate and urgent appeal for a sum of £180,000 towards a renovation and building fund.

The explanation of the present special need is to be found in the age of the hospital buildings. Hence arises the necessity for renovating much of the structure, and for providing those adjuncts which form an integral part of every modern institution, but were not dreamt of when Thomas Guy built his hospital. To take an instance which will be generally appreciated:—In 1724 about 50 nurses were considered an ample staff for the requirements of the patients, whilst to-day the nursing staff comprises 230 persons (probationers, nurses and sisters), and, when all the closed beds are reopened to

the sick poor, this number must be still further increased. For many years past the nurses have been accommodated by make-shift arrangements in very inadequate quarters, and now the impossibility of housing the augmented staff even in such quarters as have been available has compelled the erection of a nurses' home. This is the largest of the permanent works in progress, and when it is recognised how closely good and sufficient nursing affects the care of the patients and their chances of recovery, the necessary expenditure under this head will need no justification. The late Mr. Henry Raphael gave £20,000 towards the cost of this nurses' home, in memory of his wife, and his sons have made a handsome addition to the generous benefaction of their father, but to complete and adequately furnish the home a considerable amount is still required.

Of hardly less urgency than the nurses' home is the provision of a well-equipped laundry. Not only is this department one of the most important in a hospital, regarded from the domestic side, but recent developments in the aseptic treatment of surgical disease have entailed additional care and expense in this direction. The old laundry having become worn out and quite insufficient, the Governors had no alternative but to meet the imperative requirements of the case. The lighting and heating systems of the hospital were also in urgent need of reconstruction to bring them into consonance with modern ideas. This work has already made good progress, and the scheme by which one central station serves to provide light, heat, and power for the whole building will undoubtedly tend to economy and efficiency.

Another department claiming instant attention was the so-called surgery or receiving rooms, to which every year an increasing number of accidents and urgent cases find their way, and which had long been totally inadequate to the needs of the neighbourhood. In this connection it may be noted that the geographical situation of Guy's Hospital brings to its doors not only the casualties from the busiest part of South London, but also a large proportion of accidents occurring in the City. The extension and renovation of this department could not longer be delayed.

The last heavy item of expenditure undertaken is for the renovation of wards and the provision of sanitary blocks in many parts of the hospital. These works, together with a partial reconstruction of the drainage, have been going on for some years, and their extension throughout the whole hospital is so necessary that the work ought to be completed without interruption.

The provision of a small ward for the reception of insensible patients, until a diagnosis of the cause of their condition can be made, is a matter which the Governors think should appeal to many as of urgent importance. The same may be said with regard to the out-patient departments, where the want of suitable accommodation inflicts much unnecessary discomfort upon patients, nurses, and doctors. Additional operating rooms are also required. The possibility of taking these necessary works in hand, in accordance with plans already designed, must depend upon the response made to the present appeal.

The Court of Governors desire at this point to place on record their grateful appreciation of the generous support extended to their efforts by the Prince of Wales's Hospital Fund for London. Their annual grant of £5,000 was made for the purpose of enabling the Governors to reopen closed beds, and the condition thus imposed has already been complied with to the extent of freeing 45 pay-beds to the sick poor, and reopening Queen Victoria Ward, which provides for 32 female patients suffering from the diseases peculiar to their sex. In further pursuance of the design three isolation wards, with 12 beds in all, have been provided for the reception of diphtheria, measles, and doubtful cases of infectious disease which otherwise would have to be refused admission, even though the patients might be in a moribund condition.

Finally, the Governors desire to assure their supporters that in everything that has been undertaken they and those who have worked with them have never lost sight of the consideration that it must be their first aim to make the hospital efficient for the relief of human suffering and the advancement of medical science. How completely their efforts have been rewarded is shown by the striking fact that the relief or cure of a surgical in-patient, which ten years ago took on an average 25 days, is now reduced to 19 days. As a consequence of this acceleration and of the reopening of beds, the number of in-patients accommodated yearly has risen from 5,908 in 1894 to 7,320 in 1900, and these figures speak for themselves. Hardly less striking is the increase in the out-patients in the same period from 88,753 to 124,262.

The Governors append an estimate of anticipated receipts and expenditure:—

RENOVATION AND BUILDING.

The completion of the Henriette Raphael Nurses' Home, laundry, the provision of a central heating and lighting system, the extension of the casualty department, provision of open-air balconies and sanitary blocks to surgical wards, the renovation of wards, and other works (not including the remodelling of the out-patient departments) will require a sum of about	£180,000

MAINTENANCE.

Estimated amount required for ordinary expenditure on complete establishment of hospital, per annum ...		£60,000
Income from property and re-endowment fund	£30,000	
Receipts from patients in private ward (Bright ward), patients' payments for medicines, &c., and probationers' fees	5,000	
		35,000
Annual deficiency		£25,000

Towards this deficiency the hospital is at present in receipt of the following conditional support:—		
Prince of Wales's Fund	£5,000	
Hospital Saturday Fund } Hospital Sunday Fund } say ...	2,000	
Annual subscriptions	4,000	
		11,000
Leaving still to be provided annually, either by donations, subscriptions, or an increased interest from the re-endowment fund		£14,000

From the foregoing statements it will be perceived that assistance to Guy's Hospital may be rendered in one or more of three forms, viz.:—

1. By a donation to the renovation and building fund, which is the first object of the appeal.

2. By a donation or bequest to the re-endowment fund.

3. By an annual subscription or donation to the sustentation fund.

Since its establishment in 1724 Guy's Hospital has been and remains to-day one of the only two great general hospitals in the metropolis south of the Thames, and for 160 years the foundation of Thomas Guy performed a great public work without public aid. In order that its services to suffering humanity may be continued in the high state of efficiency to which the institution is proud to have attained, the Governors earnestly plead for a ready and ungrudging response to their present appeal.

H. COSMO O. BONSOR, Treasurer.

Donations and subscriptions should be sent direct to the Treasurer, Guy's Hospital, London Bridge, S.E. The annual report of the hospital or any official information may be obtained from Mr. C. H. Wells, Secretary to the Treasurer.

RESOLUTION OF THE STAFF.

At a General Court of Governors of the Hospital held on the 8th inst., the Treasurer laid before the Court the following resolution that had been passed at a recent Staff Meeting, viz:—

"Resolved—

"That the Staff of Guy's Hospital, having considered the various improvements, repairs and reconstructions which have been carried out at Guy's Hospital during the last few years, are opinion that they had become urgently necessary for the successful working of the hospital in the interests of the patients, and they are equally convinced, that the additional changes which the Treasurer and the Governors have in view, especially those in connection with the operating theatres and out-patient departments, should in the same interests be as soon as possible completed."

The Treasurer also read the following letter addressed to him by the Senior Physician and Senior Surgeon, viz.:—

26, Wimpole Street,
Cavendish Square,
November 7th, 1901.

DEAR MR. BONSOR,

We enclose herewith the copy of the resolution unanimously passed by the Staff of Guy's Hospital at a recent meeting.

At the same time it was decided that the Staff and Teachers should make a collective contribution towards the Building Fund, and, for this purpose, we have received promises amounting to £1,783.

We shall send you, from time to time, the sums as they are received by us, and we hope that the above amount will not be the limit of the help offered by the Staff.

We remain,
Yours faithfully,
(Signed) FREDK. TAYLOR.
H. G. HOWSE.

H. COSMO O. BONSOR, Esq.,
Treasurer,
Guy's Hospital.

Examining Board in England

BY THE ROYAL COLLEGE OF PHYSICIANS OF LONDON AND THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

The following are the dates on which the Examinations will commence in the year 1902.

FIRST EXAMINATION.—*Chemistry and Biology: Tuesdays, January 7th, April 1st, July 29th, October 7th. Practical Pharmacy: Wednesdays, January 8th, April 2nd, July 30th, October 8th.

SECOND EXAMINATION.—Physiology: Thursdays, January 9th, April 3rd, July 3rd, October 9th. Anatomy: Fridays, January 10th, April 4th, July 4th, October 10th.

THIRD OR FINAL EXAMINATION.—†Medicine (1st Paper): Tuesdays, January 14th, April 8th, July 8th, October 14th. (2nd Paper): Wednesdays, January 15th, April 9th, July 9th, October 15th. Midwifery: Thursdays, January 16th, April 10th, July 10th, October 16th. Surgery: Fridays, January 17th, April 11th, July 11th, October 17th.

* The Examination in Practical Chemistry will be held on Fridays, January 10th, April 4th, August 1st, October 10th.

† Candidates who registered as Medical Students before the 1st January, 1892, are not required to sit for the First Paper in Medicine.

FREDERICK G. HALLETT, Secretary.

Marasmus.

CLINICAL LECTURE BY DR. NEWTON PITT,
October 26th, 1901.

GENTLEMEN,—I thought to-day we might discuss the condition of Marasmus, which is so commonly met with in children, not only amongst the poor, but also among those who are better off; but which particularly occurs amongst the poor, and is such a common cause of death among the working classes. The disease is even more common in the north of England and the manufacturing towns than with us. The cases are always difficult, because there is no fixed rule by which you can treat them. You have to try first one method and then another in cases which have been allowed to run on for some considerable time. In the majority of cases, the post-mortem appearances are negative.

I will commence by giving you the notes of two cases that have been in the Clinical ward during the last few weeks, one of whom is progressing favourably, and the other died. A girl, five months old, was admitted on the 23rd of September, she had been weaned when a month old. Since then she had been carelessly fed on cow's milk and barley-water, and began to waste after about three weeks. After ten weeks of hand feeding, she was admitted extremely wasted. She has not suffered much from sickness, and only occasionally from diarrhœa, but has had a cough and was admitted weighing only six pounds ten ounces, in a very collapsed condition, with sunken eyes, much depressed fontanelles, and a somewhat distended abdomen. Practically there was no physical sign of any local disease. The child lay quietly and took very little notice of anything; she was put upon two grains of Hyd. cum Creta et Soda three times a day, and given milk, two parts to one of lime-water, four ounces every three hours. On the 4th October, ten days after admission, the diarrhœa had returned; the motions were green, and contained undigested curd. The child was then put upon the white of egg and water, but the diarrhœa became much more abundant during the next two or three days; it improved for a time with an emulsion of castor oil, and she was able to take diluted milk and albumen water. The child continued in a state of semi-stupor. It was then noticed that there was excoriation on the face and back of the neck, and the face became somewhat puffy; the child was excessively emaciated. On the 9th it was noticed that the child had urticaria; the motions were green; she had a carminative mixture, but the diarrhœa persisted, and the child steadily grew worse. On the 11th she had a saline infusion, but died on the 12th.

I want to draw attention to the fact that if children are fed by hand from the very first, and badly fed, they very seldom live more than two or three months; whereas if an older child, suckled for eight months, is fed by hand, and badly fed, it may have sufficient strength to survive several months. The chance of a child dying, when badly fed, is very much greater when the hand-feeding begins very early. In this case, you remember, the child was fed on the breast for a month, and for the remaining four months of its life was hand-fed. The very drowsy condition of the child, taking very little interest in anything, alternating with periods in which she was very restless and fretful is always a bad sign. Whenever you have strophulus or red-gum, or urticaria in a baby, you may be certain that it has indigestion.

I will leave the question of treatment for later on, but will refer to the general principle, that whenever undigested masses of curd are passing in the motions, two things should be done: cut down the amount of proteid in the food and put the child upon an emulsion of castor oil or some other laxative.

The child was so feeble that even from the very first its existence was most precarious, and very young infants, when so feeble, will often slip through your hands.

The other child was a little girl eleven weeks old. She was admitted on the 23rd August, and had been fed on the breast for a month, then recently with cow's milk and with Nestle's condensed milk. She was taken ill with diarrhœa on the 12th August, passed very offensive motions, and became extremely fretful and feeble, with the skin over the legs and arms wrinkled. She was excessively thin, had sunken eyeballs, and the eyelids were only half closed. The child

was put upon albumen water and stimulated. The diarrhœa ceased and gradually the child improved, going out a week later, having gained half a pound in weight during that week. She was readmitted on the 21st September, being then four months old. Again she was extremely emaciated, with sunken eyes, depressed fontanelles, cold extremities, and almost pulseless from chronic diarrhœa and vomiting. The child was put upon albumen water, was given a carminative mixture, and gradually the diarrhœa settled down. She began slowly to improve, although for several days the motions were still offensive, and vomiting occurred from time to time. On the 26th the bowel was washed out with cinnamon water, and the patient was fed upon milk and lime-water. On the 27th the vomiting had ceased, but the motions were still unhealthy. The vomiting and diarrhœa returned after a few days, again the milk had to be further diluted, and the child was partially fed with albumen water; the disturbances gradually ceased, and since, we will say, the first week in October, she began to improve. However, up to the 7th October, her condition was very unsatisfactory, the child remaining excessively emaciated, vomiting and diarrhœa occurring from time to time, and digestion being imperfect. Since then she has been putting on weight, improving in every way, and digesting her food well.

This child, in order that the mother might go out to work, was left at home and fed on Nestle's milk, and not properly looked after; as a consequence she had diarrhœa and vomiting, was treated in the hospital, improved and went out. She was readmitted three weeks later in very much the same condition as on the first occasion.

In both cases the condition of the children on admission was extremely grave. These are two typical instances of extremely emaciated children, with tissues very short of liquid, who had been badly fed; one of whom was so feeble that she died, while the other has improved so satisfactorily under treatment that she will be able to go out again before very long.

The first question that you want to make up your mind about is, in any case, whether the mischief is due entirely to defective feeding, to defective digestion, or to some organic disease. The food may be wrong in its total amount, being either deficient or excessive in its form or its proportions; it may be given at the wrong time, or the child may have digestive disturbance and be unable to assimilate it, although the food itself may be quite suitable for a healthy child.

If the *food is unsuitable*, it may ferment, and fermentation having once started in the intestine, the decomposing and fermentative processes may still continue, even when you put the child back upon suitable food; in such cases vomiting, diarrhœa and colic are the usual symptoms.

Food that is not sound and fresh must be noted as another cause; this is more particularly due to the feeding-bottles being dirty.

Exposure to cold. The cutaneous surface in proportion to the body-weight is much larger in children than in adults, and consequently changes of temperature affect them much more. Common causes of indigestion are exposure to east winds, allowing a long time to be spent in dressing the children, or letting them throw off their clothes at night and lie with their legs exposed. Generally the mode of dressing infants is one adopted for the convenience of the mother rather than for the benefit of the children. In cases of diarrhœa in small children their feet and legs often remain cold, and under such conditions you will hardly ever cure the diarrhœa. One of the most important things to which attention must be paid, is that the cutaneous surface is not chilled. Of course, small children are particularly liable to a chill in the autumn, after the very hot weather when they have been allowed to lie about uncovered. When the weather changes, the first indication of its effect is often an attack of vomiting or diarrhœa.

We may now consider conditions of *disease*. A child may be prematurely born, and a *premature child* generally has defective digestion, for, however carefully fed, it often fails to increase in weight to the same extent as a full-term child. It is particularly important to bear in mind that, owing to this fact, they assimilate less food, and therefore they acquire a smaller number of calories from their food than other

children. It is essential that you should supply them with artificial warmth, in order to rear them satisfactorily. Keep them in front of a fire, or place them in a basket with hot-water bottles, so that you may artificially make up for the defect in calories which they themselves are unable to supply.

Congenital syphilis. Many small children, generally with a sallow expression, fail to develop on account of congenital syphilis. Always look for and exclude this condition in treating marasmus, because you will not do them any good unless you give them gray powder or mercury in some form.

Tuberculosis.—It is comparatively rarely that this develops in the first six months of life. It is not uncommon for children, after the age of nine months, to become tuberculous; the tubercle may be in the lung, in the intestine, or in the glands. In many cases the evidence of tuberculosis is very obscure. We may say, incidentally, that a very important point of distinction is this: if a child, carefully fed and treated, fails to put on weight, and the weight remains persistently constant, or decreases, the probability is that, supposing it is a question between tuberculosis and maldigestion, the mischief is tuberculous. If children are merely suffering from dyspeptic disturbance, you ought very soon to find that they are putting on weight, although you may for a few weeks have a difficulty in enabling them to assimilate their food. A failure to put on weight would be in favour of tuberculosis.

Also, when you have a case of persistent diarrhœa, which keeps on, week after week, in spite of your treatment, it is more likely to be due to a tuberculous enteritis than to a merely dyspeptic condition.

Catarrhal colitis, or what Dr. Eustace Smith called mucous disease in children, occurs perhaps more particularly in their second year. The motions constantly contain mucus, and the child has recurrent attacks of catarrh in the colon.

Empyema is another cause that you must bear in mind. In small children your attention may be directed to an empyema simply by the patient's sallow appearance, and its failure to put on weight.

In *typhoid* you may have a long period of marasmus, in which a child fails to put on weight. Small children undoubtedly not infrequently have typhoid, although it is so obscure that it is very often overlooked.

Rickets may be mentioned, but it properly comes under our previous headings of erroneous dieting.

This list of causes will be sufficient for our purpose. First, *insufficiency of food.* To take the case of a child that is being suckled; when the child is having insufficient food you will find that instead of taking its meal and sleeping until the next one in a happy, contented way, it gets fretful and restless before the next meal is due and cries, and consequently sleeps very much less than it should normally. Such infants almost invariably have their thumbs in their mouth, and are constantly sucking them. Breast-milk may be defective in two ways. You may have the breast failing to secrete enough milk, and consequently the child has to work excessively vigorously to draw sufficient. In such case the child will cry and become very passionate after sucking for a short time, because it is unable to obtain sufficient, in spite of its efforts. On the other hand, some women secrete a large amount of very poor milk containing very little fat and nourishment. In this case the child generally falls asleep at the breast, and takes a long time in suckling.

These defects can be remedied to a certain extent. For instance, by dieting the mother you may increase the amount of fat by one per cent. by feeding the mother on a more nitrogenous and proteid diet, and by giving her a certain amount of fats. With regard to proteid, if it is in excess, as it often is during the first few weeks after a confinement, you can reduce this by making the mother take exercise. When the milk is constantly upsetting a new-born baby, it is generally due to excess of proteid. But it is very difficult to materially increase the percentage of proteid in the milk by dieting the mother. If the milk is undoubtedly very poor, the only treatment is to wean the child.

As to the amount of food that a child requires. When you feed an infant artificially you must see that it has sufficient food, that the proportions are right, that the meals are given at regular times, that the food is given fresh, and that the milk or diet contains some antiscorbutic constituent. The most convenient and suitable food for children, fed artificially, is undoubtedly cow's milk. Comparing cow's milk with human milk, the proteids in cow's milk are about 4 per cent., and in human milk 1·5 per cent.; the fat 3·5 per cent. and 4 per cent., and the carbohydrate 4·3 per cent. and 7 per cent. respectively. The amount of proteid in human milk is very much less, and of carbohydrate considerably more, in human than in cow's milk; but the total proportion of fat to proteid is much higher in human than in cow's milk, and I shall point out directly what an important element in the diet of children the fat is.

To render cow's milk suitable for children, it is necessary to pay most attention to the proteids. You should commence the feeding of a child by keeping the amount of proteid low. As the child improves in its digestion, the amount may be increased. The great defect of most artificial feeding is, at the onset, to try and give too much proteid. If you dilute the milk so as to reduce the proteid, both the carbohydrates and the fats are deficient. The difficulty in feeding poor children is to supplement the fats economically. The children of well-to-do people ought to have a considerable amount of cream in addition, in order to make up the amount of fat required. Even small infants will take with advantage from one to two teaspoonfuls of cream in a bottle. A child will take from one to two ounces of cream per diem.

You can add carbohydrates either in the form of cane or milk sugar; or, what answers equally well, in the form of some malted food, such as Mellin's, adding about 2 per cent., which is enough to make up the deficient carbohydrates. But you must not during the first few months give carbohydrate food in the form of starch. If you give any form of starchy food before the child is seven months old, the carbohydrate ferments and injurious digestive disturbance results. You must, therefore, to see that the elements of the food are in the proper proportion and form.

Although the relative proportions of the constituents in cow's and in human milk are quite distinct, the value in calories is almost identical. One pint of human or cow's milk is worth about 340 Calories (Kilogram-Centigrade). Or, if you like to consider the amount in grammes, 100 grammes of cow's milk are worth about 66 Calories, and the same quantity of human milk about 62 Calories.

Let us consider the amount of milk required at various ages. During the first month a child requires about 600 grammes of milk, which is worth about 380 Calories. Taking a new-born baby as weighing about seven pounds, that brings the amount to about 127 Calories per kilogramme of weight, and the value per square metre of cutaneous surface to 1,500 Calories. A child of the age of two to four months will require 800 grammes of milk which is worth 500 Calories. For a child of five to seven months the quantity of milk needed will be 1,200 grammes, with a value in Calories of 590, and this per kilogramme will come out at about 70. An adult man requires about 3,000 kilogrammes, *i.e.*, 35 Calories per kilogramme, or about 1,300 per square metre of skin-surface.

In proportion to its weight, a young child will need much more milk than one that is older. When at rest the amount of energy required is in proportion to the surface of the body and not to its weight. You lose heat from the surface of the body, and, therefore, in calculating the number of calories required you must consider the extent of the surface of the body as the main factor.

There is very little difference between the number of calories required per square metre of skin by a child six months old, and by an adult man. A man requires about 1,200 and a child about 1,300. The first includes the energy which a man needs in order to do his work; but the balance is made up, as the child requires more Calories per unit than a man at rest, because it has also to put on weight and grow. The number of Calories required per kilogramme is twice as much in a child six months old as in

a man. You must necessarily supply the child with the needful number of Calories in order to keep it in health. If you find that a child is not putting on weight properly, you should estimate the value of the Calories in the food that it is taking, and thus ascertain whether it is receiving a sufficient amount. This is most important.

An adult will absorb perhaps 80 or 90 per cent. of his food, whereas children absorb much more than that, they assimilate about 98 per cent. of the milk they take. A child six months old will require each day 14 grammes of proteid, 30 of fat, and 59 of carbohydrates. When you compare the diet of a child with that of an adult, you notice that the proportion between the carbohydrates and the fats in an infant is 1·4 of carbohydrates to 1 of fat; whereas in an adult it is about 3·4 to 1. Therefore, the proportion of fat in an infant's food should be more than double that which an adult man requires. An adult man needs about half the amount of fat which is required for a baby six months old. This is a very important fact, and one to which sufficient attention has been paid only in recent years. It is an absolute necessity, if children are to flourish, that they should have plenty of fat.

As to the way in which this is to be supplied, I have mentioned *cream*. But with poor people it can be supplied by adding a small piece of butter. If a small piece of butter is dissolved in hot milk and properly mixed with it, the butter to a great extent remains in solution and can be assimilated without much trouble. For the same reason cod-liver oil is very often given to these small children, and you can improve the condition of marasmic children very much by rubbing in olive oil on the surface. Cod-liver oil is very often used, but it has rather an offensive smell, and has no advantage over the method I have just mentioned. There is no doubt that marasmic children are much improved by the friction of the skin with oil.

Food unsuitable.—In commencing to feed children, the mistake generally made is to start with too much *proteid*. When you begin, bear in mind that the child will do much better with too little proteid, well digested, than with too much badly digested. If you give a child too much proteid, it is very apt to be sick and to have constipated motions containing undigested curds. The remedy is to digest the proteid either by means of rennet or liq. pancreaticus, or to dilute the milk with barley or lime-water, in that way reducing the proportion of proteid.

Another mistake which is often made is giving an excessive amount of *carbohydrates*. Small children digest them very badly, and if fed on them, are very apt to have vomiting, colic, and periodical attacks, either of constipation or diarrhœa. Although some children, fed upon carbohydrates may look fat, yet they are very lacking in energy, their muscles are very flabby, and they are pretty certain, sooner or later, to develop rickets. This can be avoided by feeding children simply on diluted prepared milk. There is not the same objection if you give them malted food, such as Savory & Moore's food, or Mellin's, or Allen & Hanbury's, which add greatly to the caloric value of the diet. You have to be careful to keep the amount small. In most of the formulæ which the producers of these foods put down in their tables, rather larger proportions are recommended than is satisfactory for the children, and in most of the foods there is a great deficiency of fats, which must be supplemented.

Again, if the *feeding-bottles are dirty*, the food readily ferments, and the child develops attacks of either diarrhœa or vomiting.

Children are creatures of habit, and must be fed at *regular times*. If fed irregularly, they always fail to digest their food properly, get out of sorts, and become a great nuisance to everybody.

With regard to these marasmic children, the great majority of them are admitted into Guy's Hospital, either with diarrhœa, vomiting, or broncho-pneumonia, and in a state of chronic emaciation. In healthy children, acute diseases set up well-marked symptoms. If such a child has pneumonia or any acute attack, it is very ill. Very often if a child has indigestible food, it will have a very high temperature, be extremely ill, and have severe colic. On the other hand, in marasmic children,

acute diseases produce very few symptoms. Such a child may have pneumonia, and there may be nothing at all to attract your attention to it. It may breathe quickly and its temperature may be rather high, but further than that nothing particular may be noticeable. In the same way a child may have diarrhœa, to which little attention is paid, and generally the tendency is, unless you are careful to ascertain their physical signs, for these children to slip through your fingers without any obvious reason. There is no doubt that many of these marasmic children finally die with acute nephritis. Attention has also been drawn to the fact that many develop otitis media, which it is thought may be an important factor in accelerating the end. As a rule, at the post-mortem examinations, you will not find any marked lesions The mucous membrane may be atrophied, there is an entire absence of fat, but the intestines are usually free from ulceration. Exceptionally you find multiple small ulcerations in the intestines, but these occur more frequently in the infective diarrhœas which develop in the summer.

As to the general treatment of a marasmic child. The first thing you very often have to do is to combat the collapse. A child comes in cold, collapsed, and pulseless, and drifts into a hydrocephaloid state, in which it remains, paying no attention to anything going on. Such a condition, if left alone, is apt to end in death. The first thing necessary is to stimulate the cutaneous surface. If a child is feeble and collapsed, nothing is better than a hot bath. If the child is very collapsed you should give it a hot mustard bath, with just sufficient mustard in it to make your fingers tingle, and with the water at a temperature of 104°. The child should be kept in for a few minutes, and when taken out, care should be exercised to prevent it from becoming chilled; it should be wrapped up in a warm covering, and hot-water bottles should be applied.

You will find that these marasmic children are extremely deficient in liquid, owing to the loss in the attacks of diarrhœa; and in the most severe forms it is essential to supply the deficiency as soon as possible. This can be done by injections of saline solution into the rectum, or, if that be not retained, by injecting saline solution subcutaneously (3i. to the pint). Very often, unless you in some way or other artificially introduce liquid, they are unable to digest their food, even if they retain it. In some cases great success has been achieved by feeding children subcutaneously with sterile ox serum. Injected under the skin it is very often assimilated when an attempt to keep down anything given by the mouth has failed. In most urgent cases you cannot do better than give the children only water, or the white of an egg and water, or a little veal broth, giving them less water if they are not short of liquid. They must not be kept very deficient in liquid, or they are certain to die. If the motions contain undigested food and are offensive, the wisest way is to put the child on ten or fifteen drops of castor oil, with a little mucilage and some aromatic, until the motions become healthy. After twelve or twenty-four hours of this treatment, the sickness generally stops, and the child is able to take some whey, veal broth, or white of egg, until you are able to start it again on some milk. When you do start the child again on milk, begin with an extremely small proportion of proteid. It is often desirable to bring the proteid down to one-half per cent. where there has been severe vomiting. When there is both severe vomiting and diarrhœa, there is nothing better than a dose of calomel, one-sixth of a grain, with the same amount of Dover's powder, every three hours. Keep the child warm, stop all ordinary food and allow the intestines to become empty, so that they may return to their normal condition and then be able to assimilate the food.

The question comes as to what is to be done next. If the diarrhœa persists after the bowels are empty, the use of some aromatic mixture, such as a little aromatic spirits of ammonia with some compound tincture of cardamoms, spirits of chloroform and peppermint water, will probably prove beneficial.

In many of these cases you find that with the digestive disturbance there almost invariably develops some pulmonary symptoms, such as, râles and rhonchi in the chest. In many cases the child has a furred tongue, and then a little

citrate of potash and liquor ammonii acetatis are extremely useful.

For the relief of the flatulence which is so very often present in these cases, some aromatic, or very often ten minims of sweet spirits of nitre will be sufficient.

Supposing the case goes on and the diarrhœa still persists, it can then be best checked by giving a small dose of opium with astringents. When the motions are very offensive, one of the most useful prescriptions is a dose of bismuth subnitrate, and aromatic chalk (ten grains of the bismuth), or if there is very much diarrhœa, add sp. ammon., aromat. and opium.

This leads on to two important points that we have continually to discuss, namely, the use of opium and of astringents in diarrhœa. You are quite right always to be very cautious about giving opium to small babies, but in many cases there is no drug more useful. If you begin with a small dose, half a minim of the tincture of opium, and give a second dose if there be no drowsiness resulting from the preceding one, you may give it without any risk, and even the smallest children will take it with advantage. When the motions are very profuse it is necessary to add a small dose of opium to either a castor oil or to an aromatic mixture. An astringent should not be given in acute diarrhœa, but when there is chronic diarrhœa the astringents are extremely valuable. Of these, one of the most valuable is tannigen powder, which, until it has passed through the stomach and mixed with the chyle, does not give off any free tannin. A dose of four to eight grains several times a day is very valuable in these particular cases. If the motions are frequent without being large, it is best to give small injections per rectum of three minims of tincture of opium with a little sweet spirits of nitre and a quarter-grain of sulphate of copper in starch mucilage. But you cannot lay down any universal rule. You have the general principle to go upon, which is, whatever you do, do not start with astringents, but get rid of all the fermenting material. If one line of treatment is not satisfactory you very often have to change to another. The same treatment will not suit all cases, but you will be able to improve the majority, provided you are careful that the food is in a very diluted form so that the child can digest it; that you protect it from chills and keep the peristalsis in check.

The child is very liable to relapse. A child improves for a week or two, and then may have a recurrent attack, and great watchfulness is required to deal with each attack the moment it occurs. Diarrhœa is very easily treated in children when it is acute; but there is nothing more difficult to deal with when it is chronic. In summer there is a further added trouble, in the fact that children with irregular bowels may become affected with an attack of infective entero-colitis, which is much more serious than the simple catarrhal form. In this the motions become extremely offensive, the temperature is raised, the child becomes toxic, and shows evidence of poisoning. These cases are treated very much on the same lines, but it is more important than ever to cut off all fermenting material at the beginning. In the very severe forms an antiseptic, such as carbolic acid, creasote, or calomel is extremely useful. In some, where there is very severe diarrhœa, nothing will answer better than an injection of morphia, giving one-hundredth of a grain. We have to adopt various methods in dealing with these cases.

If, in spite of all that you may do, the child's eyes remain sunken, the fontanelle depressed, and the child lies in a lethargic condition, with the skin hanging loose and inelastic, you can very often improve the digestive power by saline injections, either under the skin or into the bowel.

To say a few words as to the constipation of small infants, which very frequently alternates with attacks of diarrhœa. As a rule, in small children constipation is due to an insufficiency of fat in the diet. It may be due to excessive proteid. In other cases it may be due to the defective nutrition of the bowel as a result of preceding bad feeding. Although perfectly suitable and right food may be administered, still a preceding course of insufficient and unsatisfactory diet may have led to a condition of constipation. As a rule you should try to avoid relieving it by drugs. A good deal can be

done by rubbing and massaging the abdomen, and in that way keeping the bowels regular. Much may be done by giving the child fat, or, in many cases, malt answers very well; the malt acts as a laxative and often helps to keep the bowels regular. In exceptional cases it is desirable to give enemata, though it is a bad principle to use them at all systematically. Still, if a child has a bowel laden with hard fæces, it will be much less upset by an enema, either of glycerine or soap and water, than by an active purge. If a purgative is given, always make the dose as small as possible, just sufficient to keep the bowels open. If you give a powerful purgative, the bowel only becomes more constipated afterwards, and the purgative will have to be repeated.

In some children there are periodical attacks of constipation, with white motions due to a great deficiency of bile. In such cases, very often a small tablet of half a grain of calomel, given once a fortnight, or occasionally, may be found very beneficial. There is no great objection to adding, when necessary, to the bottles of food for small children, phosphate of soda or fluid magnesia, which upset them very little.

But occasionally, in spite of all your treatment, the constipation persists. Then you may give half a minim of the tincture of nux vomica, with a small dose of senna and some aromatic, which may be continued for some time. Keep the bowels regular by giving a mixture like this daily for a fortnight, when the necessity for giving medicine may pass off, and you will be able to give it up altogether.

There is one other little instruction. When children are liable to diarrhœa, it is not a bad custom for them to wear a flannel belt around the abdomen. There are many children who at once get rid of the liability to these attacks when the abdomen is kept warm with a flannel belt. Moreover, you should be particularly careful to see that their legs are properly wrapped up. While speaking about wrapping them up, I would lay special stress upon the fact that they should not be allowed to stay in over-heated rooms. The use of too warm a room will increase the surface circulation and cause excessive perspiration, and a child that is kept in an overheated room is much more likely to develop diarrhœa than if it were kept in a cool room. The temperature of the room should not be above 65° Fahr. during the day, and 60° at night. If a child lives in a room with plenty of fresh air, the liability to diarrhœa is very much diminished.

There is no further time at our disposal to discuss the treatment of the more chronic cases.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

The Clinical Wards.

DEAR SIR,—I see from your columns that a change has been made in the arrangements of Clinical ward, so as to make the teaching there more accessible to the general body of senior students. While recognising that there is something to be said both for and against the change, I should think it would ultimately be found generally beneficial. Experience seems to shew that fresh faces, and a good many of them, act as a useful stimulus to the teacher. But as changes seem to be in the air I am writing to suggest another which I have long thought might be for the general good. My proposal is, that the special privileges of the Clinicals with regard to the admission of cases should only be exercised during four days in every week, during the remaining three days these privileges being exercised by the taking-in house-physician.

This would provide a sprinkling of acute cases in the general wards, and widen the range of subjects chosen for lecture from the cases in Clinical.

I hope you, Sir, may regard it as one of the few reforms which are of real benefit to the "many" and of no detriment to the "few."—I am, yours faithfully,

AN OLD CLINICAL AND H.-P.

Clinical Lectures.

DEAR SIR,—May I make a suggestion? All the columns of your GAZETTE are interesting, but of some the interest is ephemeral, of others permanent. The reports of clinical lectures we would like to bind together so as to have them of easy access. Could you not print extra copies of these lectures and sell them at a small price separate from the GAZETTE, so that at the end of our time here we may have a valuable volume of clinical lectures by our staff.—Yours truly,

November 19th, 1901. F.

Passim.

It can scarcely be necessary for us to do more than direct attention to the Hospital Appeal, published in our columns to-day, to secure for it careful perusal and earnest consideration on the part of our readers. The statement, and the Treasurer's letter which accompanies, are models of clearness, and establish a case which is beyond doubt or criticism, and which deserves the most complete support.

How warmly the work undertaken in the past six years is approved of by the generation now at the hospital may be judged from the terms of the resolution passed by the Medical and Surgical Staff. We are enabled to publish the text of that resolution, and to record the eloquent fact that it was backed up by a joint contribution to the Renovation and Building Fund of nearly £2,000.

That the effort now being made will have the hearty sympathy of every individual possessing a link with the foundation of Thomas Guy, is a foregone conclusion. We are given to understand, however, that, recognising the sacrifices which Guy's men have made for the Institution in the past, no official pressure will be brought to bear upon them for personal contributions to the present needs. But they will be given the opportunity to enlist the support of others, and in this connection the Treasurer speaks truly when he urges, that while Guy's has a special claim for practical sympathy from London, the claim is even world-wide.

"An Old Clinical and H.-P." makes the original and rather startling suggestion this week, that the Clinical for the week should only be allowed first choice of cases taken in during four days, and that during the remaining three the H.-P. should be given this privilege. In these matters a too conservative spirit has to be guarded against, or else one is apt to become bigotted, and wish to retain old methods and customs simply because they are old and have been in vogue from time immemorial. On the other hand, before a change can be welcomed with open arms, it must be carefully thought out in all its bearings.

Looking at this proposal purely from the effects it would have on teaching, one is bound to admit that a concentration of similar cases into separate wards tends to make the medical education of men, unable to hold all the appointments, one-sided, and a sprinkling of acute cases in the general wards would prevent the chance of men being turned out on the general public without having watched the progress and treatment of such cases. That it would widen the range of subjects chosen for clinical lectures is comparatively unimportant, for if a lecturer finds himself limited, surely it would be a simple matter to lecture on cases that have been under him whilst in the general wards.

Turning to the more practical side of the question, many of these acute cases would need immediate operation, and by some chance they have a habit of turning up at inconveniently late hours, when the assistant surgeons' dressers, who under present arrangements dress at operations in the medical wards, have left the hospital. On whom would our correspondent place the duty of getting instruments and dressing at the operation? It would almost be adding insult to injury to expect the clinicals to do it, and even now, Clinical being full, when a stray case needing operation gets into the general wards, it only too frequently devolves on them to do this rather thankless task. Again, are the three days of privilege for the H.P. to come together, or are they to alternate with those on which the Clinical has the choice? In the former case there would be the grave danger of the H.P. filling his beds, and then the Clinical would "willy nilly" have to take in all sorts and conditions of cases. We should very much like to have a second letter from "An old Clinical and H.P.," elaborating in detail the method on which he would carry out his idea.

Mr. F. E. Fremantle's book, "Impressions of a Doctor in Khaki," has just reached us;

although we have only had time to dip into it, the glimpse has been sufficient to show us that the book is one of great interest and should be especially so to all Guy's men. The spirit of frank, out-spoken criticism in which it is written is a refreshing change from the unqualified and indiscriminate praise that so many writers have showered on the medical arrangements at the front. The book is most liberally illustrated by excellent plates, and we hope it will meet with all the success it merits. We expect soon to review the book in detail.

THE Guy's results at the pass examination for the final M.B., London, appear to be most satisfactory. At present only a list of numbers has been published, so it is difficult to give any exact figures. It is hoped that still greater honours will be gained in the B.S. and honours exams. We would congratulate all the successful men, especially Messrs. Atkins, Northcott, Robson, Keates and Trubshaw, who were placed in the first division.

ALTHOUGH the number present at the Rev. P. N. Waggett's second lecture, given last Tuesday in the Court Room was considerably larger than on the first occasion, it is a great pity he was not better supported, for the lecture was nothing short of a scientific treat. Men who feared a sermon dressed in the garb of a lecture were very mistaken, for Mr. Waggett spent the greater part of the time in giving evidence based on experiments and close observation of nature, showing how mistaken those teachers were who, drawing an analogy between an *organism* and society as a community, would apply the laws and conditions governing the former to the latter. He dealt with the question of transmission of acquired characteristics in regard to both organisms and society in a closely-reasoned, scientific manner. The whole was tinged with a touch of dry humour, which added considerable zest to the talk. We hope that the lecturer may be persuaded at some near date to come amongst us again.

THE suggestion that the Clinical lectures should be published separately, so that they might be bound together, made by one of our correspondents this week, has been mooted before. Although no doubt, as he says, some of the matter in the GAZETTE is of purely ephemeral interest, yet we would humbly believe that some of the notices and discussions of passing events would gain, rather than lose interest in keeping; and after all, the GAZETTE even, when bound as a whole, does not make such a very bulky volume. However, we should like to hear other opinions on the question.

THE news that the Assistant Matron, Sisters Stephen, Martha, and Charity, are on the 26th instant to sail for South Africa to take up work as Matrons in the Concentration Camp, caused considerable excitement in the hospital; whilst regretting most sincerely, that as a hospital we must so quickly lose their services, at the same time we most heartily congratulate them on their appointment, and hope they will come back full of enthusiasm for the many new experiences in work and pleasure that it will be their lot to meet.

WE are surprised to see that the *British Medical Journal* for October 19th, in reviewing what they apparently believe to be recently-issued reports of various hospitals, should give a criticism of the fifty-fourth volume of the Guy's Reports, for although in the past the numbers have been somewhat delayed in appearing, under the new editors the fifty-fifth volume was published some months ago. *Apropos* of this, it is interesting to read that the *Birmingham Medical Review* for November, whilst praising the latest volume as one of excellent merit, notices the lack of papers on subjects of surgical interest. We have already expressed the hope that the next number may see a more equal division between medical and surgical papers.

A CHRISTMAS-CARD is being issued, the proceeds of the sale of which will go to the Out-Patient Visitor's Relief Fund. The subject is the memorial to Guy, which is situated in the Chapel. The cards give a good representation of it, but the enlargements, a convenient size for framing, are extremely good. They can be obtained from Mr. Mills, the librarian.

THE First Fifteen had a runaway victory over Croydon, crossing their line no less than nine times. Although we inflicted heavy defeat on Croydon last season, this is the largest crushing we have yet given them. The game was played at Honor Oak Park, and although we had several men away, their places were most ably filled by some of our veteran performers. Walker and Alexander played in the three-quarter line, and exhibited some of their old powers, particularly in defence, the latter player saving splendidly on several occasions and setting an example which might well be followed by several of our present team. Alcock was brilliant throughout the game and was responsible for four of our tries. He ran well, and his weight was most effective on several occasions. The place kicking was extremely weak, and as this is only a matter of practice, it should be seen to at once. Of course, the men we usually rely on were away, but there should be others on whom we could rely when in necessity.

AT Bedford we scored another victory by five tries to nil, this time none of them being converted. In a one-sided game it makes little difference, but in a close match the issue of the place kicks is enough to turn the balance, and its importance should not be overlooked. The forwards are better, but there is still room for improvement. The ball does not come cleanly out of the scrum, and in following up majority of the pack is too apt to lag and leave all the work to the leaders.

TO-DAY, against the Old Merchant Taylors we shall have to do our very utmost if we are to be winners. They are a strong team this year, but should our side be in its best form we think that it will be quite equal to theirs. Such a game deserves the interest of all, and everyone who is not playing should turn up and support the team.

IT is no use denying it, but up to the present the First XI. has not shown the form that might be expected. We have a large number of last year's men available, and enough new men to fill the vacancies satisfactorily; yet the record of matches is not good. We lost heavily in the Surrey Cup, when our opponents were extremely good, and the ordinary matches have not been as successful as in former years. The defence seems good, but the forward line has very little sting at present. To make a really good attack they must be much more settled than they have been up to the present, and infuse more combination and vigour—particularly the latter—into their play. The Second XI. have been doing well, and defeated Alleyne in the second round for the Surrey Junior Cup by 1 goal to nil. The half-back line seems to be the strongest part of the team. To-day they are playing in the third round—a record for the Second—and we trust they will reach the later stage.

THE squash match between the Clinicals and Residents produced some really good play, and ended, after a close struggle, in a victory for the latter. The court is very much the worse for wear, and accurate play is considerably interfered with. The floor is very patchy in places, and now that there are so many who are keen on the game, it would be a great benefit if it were relaid. Should any repairs be contemplated, it would improve the court vastly if the door was shifted from its present situation to the flank wall facing the physiological building at its junction with the return wall.

OWING to lack of space we are unable to print the Syllabus of the forthcoming Cambridge examinations. A copy, however, may be seen in the Library. The last day for sending in schedules is Wednesday, November 27th, 1901.

The Odontological Society of Great Britain.

GRANTS IN AID OF SCIENTIFIC RESEARCH.

THE above Society is prepared to receive applications for Grants in aid of the furtherance of Scientific Research in connection with Dentistry.

For particulars and forms of application apply to—The Hon. Secretary, Scientific Research Committee, Odontological Society, 20, Hanover Square, W.

Religion and Science.

THE REV. P. N. WAGGETT gave the second of his two lectures on "Religion and Science," in the Court Room, on Tuesday last. Mr. Blake Odgers was in the chair, and the attendance was good.

The lecturer dealt with a very difficult department of his subject in a most able way. What follows does not profess to be more than the merest summary of what he said. He began by pointing out that the controversy between Religion and Science had come to a clear issue in the views of F. Nietzsche. Nietzsche himself was a good living man, but his philosopy was an attack upon the foundations of the accepted morality. His ethical formula was "Let us get back to Nature," and he asserted that Nature knows nothing of chastity or self-restraint, and, therefore, the "natural" instincts are sufficient guides for life. Chastity, the enemy of human progress, must go, and so must also the social virtues of charity and mercy. The old morality was obstructive to progress because it did not allow the weak to go to the wall. In so far as hospitals and medical men were hindering the law of the elimination of the unfit, their work was an anachronism. "You see," said the lecturer, "the point in debate between religion and science is not, nowadays, How we came to stand on our hind legs, but whether we ought not to go down again on all fours!"

Mr. Waggett did not further pursue this side of the question, but addressed himself to the more useful task of an examination of some of the presuppositions of Nietzsche's theory. The chief of these was that society might be looked upon as an organism. And, in fact, the rest of the lecture took the form of a strong plea for a thorough-going criticism of the inferences which were drawn from this postulate. All the books upon the subject exhibited, so the lecturer thought, a fatal flaw. The writers invariably took it for granted that the social organism would correspond exactly to the biological organism, and that it was possible to translate every thing biological into some corresponding social term.

Before this could be done, however, it was necessary to ask and answer three questions:—(1) In what sense do we use the word "organism" when we apply it to society? (2) Granted that society is an organism, do we know that it follows the same laws of development as the biological organism? (3) What is the formula which will enable us to translate biological into bio-sociological terms? Until these questions are answered we shall not advance. At present the whole subject is muddled. Problems of phylogeny are not distinguished from problems of ontogeny. Sometimes, again, the social organism is spoken of as though it were a phylogenetic species; at other times, as though it were an ontological entity. Such confusions as these ran through a book, otherwise excellent, "On Development by Atrophy," translated from the Dutch, which had recently appeared.

In further illustration of this, the lecturer said that he was convinced of the truth of Weissmann's contention that in biological organisms acquired characters were not inherited; but it did not follow that they were not inherited in the social organisms. On the contrary, in society they were clearly and abundantly inherited. The acquired character of being an earl with £10,000 a year was transmitted from father to son. The reason for this was, of course, that in society there was another nexus besides the physiological, viz., the nexus of institutions. Sons of rich men start as rich men. This is quite a different way to the way pigeons breed.

The conclusion of the whole matter was that we must be content with our old rules of morality, at any rate until we had less hazy notions of what we mean when we speak of society as an organism; until, for instance, we can say with some degree of precision what there is in society which corresponds to the animal processes of nutrition or reproduction.

After some suitable words by the chairman, thanking Mr. Waggett for coming from Oxford to speak to the men, the proceedings came to an end.

Novelties.

PETANELLE COMPANY'S PRODUCTS.

We have received numerous samples from the Petanelle Company, and have submitted most of them to trial. All these articles are made from peat by an entirely new method. The peat wool is of a light brown colour, and enters largely into the composition of the various surgical dressings that are made by the Company. The wool is a good absorbent, and seems to have well-marked deodorant properties. On this account it forms an excellent material for underclothing, and when manufactured closely resembles ordinary wool in appearance and texture The surgical dressings that we have tried all appear to be good, as they are light and slightly elastic, besides possessing good absorbent qualities. Among the numerous dressings there are absorbent wool, aseptic pads, gamgee tissue, vaccination pads, and a variety of others. Of the disinfecting powder we can say but little, as it has not been tried for long, but it seems an effective deodorant. The disinfecting fluid we have tried, and although we cannot state its actual germicidal power, it is most useful in septic cases. It has an extremely pleasant smell, in marked contrast to many other disinfecting fluids and rapidly abolishes fœtor from a foul wound.

MESSRS. ARNOLD & SONS, the well-known Surgica Instrument Manufacturers, of 26, 30 and 31, West Smithfield, and 1, 2, 3, 18 and 19, Giltspur Street, have again received the highest Award for excellence in workmanship at the Naval and Military Exhibition, Crystal Palace, and also the highest Award at the Military Exhibition, Earl's Court.

In Lighter Vein.

THE fact that the work of the Charity is carried on, not only amongst the poorest, but also the highest circles, must be very gratifying to the hospital authorities.

The present externs are a most able and fascinating body of men; otherwise we should be inclined to doubt the following note, which the Junior Charity received from one of them the other day. It commenced as follows:—

"Patient is a *Primate ! ! !*"

[NOTE.—The new boundary does include Lambeth.—ED.]

The ladies are ever with us, bless 'em. During the last few days many of them honoured Guy's, to pass through the fiery ordeal of the final M.B. That the presiding examiner set a fine example of knightly courtesy towards the fair sex, which we should do well to follow (the example I mean, not the fair sex), the ensuing story will show. A fair candidate, after puzzling over a skin lesion, asked the eminent physician presiding what she should do in a case of doubt. "Shall I put down two answers, if I am not sure which is the correct one?" "That question, madam, I cannot answer," was the reply; "but I can lend you a halfpenny to toss up with, if that will help you to decide."

Talking about ladies, brings me to the subject which I wanted to discuss this week, namely, "nurses." Nurse! Ah, dear reader, there is magic in the very word.

Here we have woman at her best. Suffering humanity brings out her finest characteristics; whilst the matron quells her less attractive points. Of course, there are nurses *and* nurses. There is the nurse who considers that the hospital was created and now exists for her especial benefit. She regards the students as so many thick-headed boys, over whom she is placed to teach and keep in their place. They say there is a type (but this I don't believe) who consider Guy's in the light of a matrimonial market. There is the religious and intensely emotional nurse, who worships at the feet of the Curate. But these varieties are few and far between; the great majority utterly obliterates them. The true nurse combines gentleness and womanly pity with professional skill. Loth with suggestion, ready with assistance, she carries out her work with such self-obliteration that we are sometimes apt to forget her very existence. Through long and weary hours her sympathy and tenderness never fail. She is, and always will be, a glory to her sex, her country, and this great hospital.

[Remember, in future, that you are not writing for "Good Words," or "The Sunday at Home." —ED.] THE BIRD OF PREY.

Nursing News.

MATRON'S OFFICE.

We have the pleasure to announce that the Secretary of State has appointed the Assistant Matron (Miss Hyland), Sister Stephen (Miss C. R. Jones), Sister Charity (Miss Willes), and Sister Martha (Miss Finnemore), to the posts of Matrons in the Concentration Camps in the Transvaal, and that they will sail for South Africa in the ss. "Canada" on the 26th inst. Although much regret has been expressed by the nursing staff at the sudden departure of so many sisters, we are sure that everyone will congratulate them on their appointment, and wish them every success in the new and arduous work they have undertaken.

On October 26th Probationer M. Creasy was appointed head nurse in Bright ward, and on November 7th, Probationer C. Densham was also appointed head nurse in the same ward.

On November 9th, Nurse Beard (head nurse in Martha ward) left the hospital, having completed her training last August. Nurse Ball (head nurse in the Surgery) was transferred to Martha, and Probationer Lewin was appointed head nurse in the Surgery.

On November 9th, Nurse Faulkner left the hospital on completion of her training, and Probationer Bishopp was appointed to succeed her as head nurse in Philip ward.

On November 14th, Probationer Leslie was appointed head nurse in Bright ward.

On November 15th, Nurse Stanyon left the hospital to take up Midwifery training, and Probationer Cotterell was appointed to succeed her as head nurse in Queen ward.

On November 16th, Nurse Mudge left the hospital to take up Midwifery training also, and Probationer Neale was appointed to succeed her as head nurse in Mary ward.

Letters from a far-off Country.

[The following letter, to judge by the names of the parties concerned, is the work of a civilian medical officer who was killed in the early part of last year while serving with a column in the Orange River Colony, under circumstances which would, had he lived, have gained him the Victoria Cross. It is addressed to a member of the Junior Staff of one of the London hospitals.—ED. G.H.G.]

To the Editor of GUY'S HOSPITAL GAZETTE.

MY DEAR ———,—I hardly know myself why I am taking the trouble to write to you, seeing that when we were together at St. Y.'s, we were never more than acquaintances. Yet perhaps the reason is to be found in the fact that I have often thought about you; have often pondered over your ways and your methods, and your probable end. I will admit that so far you have fully justified my expectations. I said just now that we were only acquaintances. In a hospital such as ours, one is forced to know more or less everyone. There is no room for active enmity, and barely room for mere non-recognition. Thus we were acquaintances, though don't for a moment imagine that for my part it was for any attractive quality that I found in you. To tell the truth and nothing but the truth, you were always a bit of a worm, and on many occasions there was a deal of the cur about you. I don't like curs, real or metaphorical; and I don't like worms. I like them less after my experience on the veldt, but that's another story. I remember the first time I met you as distinctly as if it were only yesterday; I don't know why I remember it, for heaven knows, you are not worth much consideration even now. You were sitting in the dissecting-room looking at your part; I had the part opposite you, and I nodded as I sat down. I remember the stare, the offensively vacant stare with which you regarded me. I got to know that stare later, and attributed less importance to it, for it was really quite as much of you as the glassy gaze of the cod is of that fish. By the way, have you ever realized what a likeness you bear to a cod? Your eyes—hazel I suppose you call them—are wonderfully similar, and your general expression—but that's a digression. Yes, you returned my salutation with a blank stare, a soul revealing stare, and that was all. It riled me, I admit, horribly, for you were the first bounder I had met in the hospital, but later, when I knew you better, I could afford to smile. The man on the lower—my side—was a cheery little grig, it was ——— who was killed at Paardeberg—and made friends at once. More as a wedge for the introduction of further conversation than for any other reason, we started a discussion on the best dissecting-room manual, for we were very young then and very critical. He rather inclined to Ellis, while I, in the light of a recent purchase of Cunningham, was prepared to stake my all on that author. Then you chipped in. You were reading some minute instructions from Cunningham's Anatomy at the time, and you volunteered the advice "I should get Ellis if I were you." When pressed for reasons you said "You are a Conjoint man aren't you," and receiving an affirmative, seemed to consider the matter settled. "But you are reading Cunningham," I objected. "Well, yes, you see, but then I am a London man." That summed up your whole character; you were a London man, and as such of a different clay. I began then to see a little light, and forthwith addressed all further remarks to the man on the "lower."

Do you remember the very obvious way in which you used to play up the dissecting-room staff? The extraordinary earnestness with which you used to follow the demonstrations on the other parts, the deferential way in which you dropped your scalpel and closed your book on the approach of a demonstrator, and the servile way in which you proffered forceps and knife when a little dissection was needed? You overdid it once, I remember, when you thought that by staying dissecting while a cup-tie was on you would achieve great renown among the staff as a keen man. You were the only one left in the dissecting-room, and were rather taken aback when the demonstrator suggested that you should go to the match and not waste the afternoon pottering about there! It was a false step, that, but you made up for it. What a howl of indignation went up when you got the Smith prize for the term's dissection. Everybody knew that your partner had done all the work, but you managed to steal the credit. You dissect! Why, I've seen a neater dissection made by a pom-pom shell. You certainly managed to pull off your Inter. M.B. satisfactorily, but then after the amount of sheer grind that you put in, only an utter rotter would have missed it. You never shone much in the Physiology line, there was a little too much necessity for reasoning powers in that science to suit you. But when you had once managed to swallow all that the text-books told you, no question on the book failed to call forth the appropriate paragraph. So you were passed in the first division. Much the same tactics prevailed in your ward work. Many of the men who were on with you at the same time did far and away more work and better work than you, but only got half the credit. You had a neat trick of always being ready for the Registrar which took that harassed young man's heart by storm. You never shirked a parade when the Old Man was taking it, but you never volunteered for fatigue. The nursing staff barred you, they saw through you; and your H.P. had some difficulty in restraining an eager boot. But what did that matter? The H.P. couldn't sign you up badly merely because he detested you, and the nurses, more's the pity, haven't a voice in the matter. I often used to think that a sister's opinion might be many times taken with advantage when they are awarding the plums. When you wanted a holiday, you didn't apply for leave in an honest manner, but skrimshanked and got sick leave and the sympathy of the C.O. I will give you the credit for a very complete method of self-advertisement. It was never "Mr. what's-

your-name?" with you. The great interest and earnest desire for knowledge that you evinced made you a noticeable bedside feature. It must have cost you not a little time to look up all those curious debatable points which pleased the physicians so. Of course, it didn't matter that the other clerks had heard it all before and wanted their teas; you get your little bit of boot-licking in anyway. Oh, you were a stinker! There was a man in Ours not unlike you in that way—I mean the boot-licking. We pegged him out one frosty night, and quite cured him. I think if you had been pegged out in the grounds for a day or two it might have improved you. Or it might have killed you, which would have been better.

Some men change for the worse and some for the better when they get qualified. But in your case I don't think it made any difference. Of course, you got through first shot, as you took good care to tell any men who had received the pink paper. But I don't remember ever hearing you mention that you were nine months late with your Colleges. Perhaps it slipped your memory. I remember a Tommy once held up a man, and after removing his rifle and bandolier, asked him if he had any other arms. Of course, the reply was "No," but the Tommy spotted a ·450 Webley, and quietly removed that from his pocket. "Oh, I had forgotten the pistol," said the man. A little later Tommy prodded his prisoner with his rifle and ran a couple of inches of bayonet into his leg. When the chap protested—"Oh," he said, "I had forgotten the bayonet."

A curious memory is convenient sometimes. You begin to reap the fruits of your love of self-abasement when you get a House Appointment over the head of A——. Everybody knew he was the better man—even you must have known it; but A—— is a man, and, as I have said before, you are a worm. There is some truth in the adage of the worm turning. And when you were appointed it did not take much perspicuity in the average man to spot your incapacity. Howlers you made in plenty, and figured in one or two scandals. Yet you managed to clear out fairly well in the end, by some bit of enormous luck, I suppose, and when you came to apply for testimonials, the English language ran dry in laudatory adjectives. But we knew, if they did not!

So now you have wriggled on to the staff. With your leech-like propensities you will doubtless stick fast now you have got there, and in time will rise to a position of mediocre eminence. Affluence doubtless will come, and with it a conviction that you are what you seem to be. But those who have known you, who have seen you from your youth up in your profession, will never be deceived by your meretricious attainments. And in time, perhaps, you will in your turn have brought to your notice some such person as yourself, some such human slug, and out of fellow feeling will cherish the beast and bring it to a happy end. And in the coterie of your fellows, the few who have succeeded as you have succeeded, the few who have risen by the same methods, you will have honour, but in the eyes of the many who knew you at all times, you will remain for ever a most contemptible cur. I had always intended to tell you what I thought of you on some convenient occasion. A mauser bullet in my anterior mediastinum, and incidentally the posterior, has rendered that impossible. Hence this letter. Take it to heart; look back on what you have done and then analyse your feelings. But you cannot have any decent feelings anyway. Pah, I'm sick of you.—Yours truly, ——

Pass List.

Final Conjoint Examination, October, 1901.

MEDICINE, SURGERY, AND MIDWIFERY.—*A. E. H. Pakes.

MEDICINE AND SURGERY.—*F. M. M. Ommaney.

MEDICINE AND MIDWIFERY.—*H. K. Lacey, *A. Pearson, M. J. Rees, *A. W. Soper, *J. A. Wood.

SURGERY AND MIDWIFERY.—E. G. Allport, H. Barber, E. Bigg, H. A. Cutler, C. R. Howard, A. E. H. Wall.

MEDICINE ONLY.—*J. A. Andrews, *S. C. H. Bent, *W. H. Bowen, R. L. Jimenez, *F. B. Manser, *R. P. Marshall, T. Morgan, *E. J. O'Meara, F. W. Smith, H. P. Wiltshire, *M. D. Wood.

SURGERY ONLY.—*E. G. Andrew, J. Evans, G. F. Humphreys, F. D. S. Jackson, A. C. Nash, A. C. Osburn, S. S. H. Shannon, *J. B. A. Treusch, F. E. Welchman, J. L. Whatley.

MIDWIFERY ONLY.—M. W. Cohen, *H. A. Ehrlich, H. A. Higgens, A. C. Ransford, W. O. Roberts.

* Denotes completion of examination.

Second Examination.

O. Black, R. D. Bridger, C. J. S. Dismorr, R. Edridge, R. Franklin, C. P. Harvey, H. F. Hatfield, L. Myer, W. S. Orton, R. M. Rendall, M. B. Taylor, J. D. Thomas.

First Examination.

CHEMISTRY.—J. H. Mayston, A. E. Preston.

PRACTICAL PHARMACY.—C. E. Bartlett, T. B. Fawley, E. N. Jupp, H. M. Langdale, W. C. Lewis, B. I. Rahim, H. G. Rashleigh, W. W. Read, A. Shepperd, T. M. Smith, W. A. G. Stevens, R. H. Terry, R. Willan.

ELEMENTARY BIOLOGY.—A. V. Ledger, I. Valerio.

License in Dental Surgery, November, 1901.

FIRST PROFESSIONAL EXAMINATION.

MECHANICAL DENTISTRY AND DENTAL METALLURGY.—E. F. Deck, H. J. Fox, R. G. Harrington, A. L. Mathews, A. L. Moon, L. Myer, W. R. Ransford, S. W. Robinson, N. B. Soper.

MECHANICAL DENTISTRY ONLY.—F. Barkshire, R. A. Scott, T. Vernon, E. White.

DENTAL METALLURGY.—H. S. Chandler, A. B. Cocker, H. J. Cole, W. E. Derriman, T. J. Green.

Final Examination for the Diploma in Dental Surgery, November, 1901.

PARTS I. AND II.—G. S. H. Barnett, J. B. Barron, A. H. Bell, C. A. W. Buckell, S. Clifford, F. G. Day, J. S. Francis, R. J. Green, W. E. Griffin, C. Mills, F. R. E. Palmer, W. H. Peatfield, E. Phillips, *E. A. Longhurst, P. J. Reid, J. E. Spiller, H. C. Visick, H. L. Whitlow, C. D. Wood, E. H. Wyand.

* Exempt Part I., M.R.C.S. Eng.

PART I. ONLY.—W. H. Solomon, J. W. Walton.

PART II. ONLY.—O. Black, T. A. Chignell, O. H. Dignum, W. Giles, W. Henderson, S. E. Pedler, A. E. Steele Perkins, W. K. Perry, S. J. Saunders, A. C. Stroud.

Medicine in Fiction.

ALTHOUGH there are some amongst us who hold that Medicine is in itself a sufficiency for its students, and proclaim in combative tones that any time spent on other subjects than medicine is as good as wasted, yet the majority of men feel differently and take an interest in extraneous matters even if only as a relaxation from stiff scientific trammels. The fine arts, literature, music, the drama, are, according to these ascetics who preach Medicine, the Sole Aim of Man, mere child's play, and do not deserve even the passing attention of one who has adopted the stony-way that they pretend never to forsake. And yet, although the inexorable finger of our would-be guides points on and ever upwards—we, the foolish ones, occasionally stray aside from toil and rest awhile amid the refreshing realms of the fine arts. It may be a waste of time, still to an ordinary person it seems a vast pity that a man should never take the trouble to cultivate anything outside his own particular profession, and if cast into everyday society should be unable to make himself interesting without resorting to a scientific discussion. Fortunately, however, many medical students do think it worth while even to read a mere novel, and to them some points appeal more than to most. We do not read with avidity the effusions of the so-called realistic writers with lurid details of imaginary hospital scenes of operations. Nor do the gruesome descriptions of the horrors on a battle-field by the greatest of word painters appeal to us. A lengthy account of the various ulcers and other lesions presented by a train-load of pilgrims only serves to make us think of a condensed surgical out-patients, and show us how faithfully a layman can paint an unsavory picture in his efforts to arrive at Realism, the only condiment that touches the jaded palate of the present age. Yet certain well-worn topics of the novelist never fail to excite an interest or a smile, possibly derisive, as we meet them time and again.

"Brain- ever" is one of the most valued heirlooms of the lady novelist. The heroine reaches an awful crisis; her lover is reported dead, or even worse, and with an awful shriek she swoons, and for weeks after she lies at death's door. Her once luxurious hair is cropped off, and she lies delirious, attended day and night by that delightful creature, the hospital nurse as given us by the novelist, muttering at intervals the name of him that is so dear. Unfortunately these cases are not met with in hospital practice, as they would be so useful to the medical ward clerk, or under our new regulations to the clinical, who could take in the referred candidate, and show him a really interesting nervous condition.

The administration of anæsthetics is certainly a very weak point in sensational novels, and many of us envy, oh! how keenly, the ease in which the villain of the piece renders his unfortunate victim devoid of resistance. That individual, burdened with some weighty national secret, meets with a foreigner, a most charming man, who comes possibly to the mess as a guest, and is received with open arms as a real good fellow. At the dead of night the hero is alone with the villain—generally a Russian spy, who has designs on our distressful country He suddenly has a handkerchief clapped over his mouth, breathes a sickly perfume, feels weak in his limbs, trys to utter a cry for help, and falls like a log, only just in time to be rescued by the useful low comedian or the faithful retainer. The ease and rapidity with which the act is accomplished make us think of the stage of exhilaration and the desperate struggles of several surgical ward clerks, in order to meet the deficiencies of our incompetent anæsthetists.

Spontaneous combustion received the support of the immortal Dickens in that famous tale "Bleak House," and lends us even more interest on the subject than Professor Dixon Mann.

The portraiture of the human frame divine, both in words and on canvas, has undergone such varied changes that a mere student of medicine has a stiff task to keep pace with it. The willowy, inanimate creature, suffering from a bad form of chlorosis and concurrent dyspepsia, that served as a heroine in the books read by our grandmothers gave place to a robust individual with a love for outdoor life and athletics, and blessed with a certain amount of commonsense that we associate with a typical English girl. But, unfortunately, another turn of the kaleidoscope has left us worse off. The wavy brown hair and comely features have left us, and we have a thin mobile face surmounted with a shock of blue-black hair, or even worse, with hair that is nearer a sandy colour than anything else. The mild blue eyes that we loved so well are no more in fashion, and a sort of greeny colour prevails.

Alas, this is not all, for some of our eminent painters give us as ideal a face with no alae nasi, a thick upper lip and half-opened mouth, only suggestive of adenoids or some other form of nasal obstruction. The graceful neck of our countrywomen is so no more, and a well-developed goître seems essential to beauty, if we follow

some of the leaders of Art — with a capital A. A markedly angular figure is inflicted upon us, and we feel that it only needs a few peacock's feathers and some scraps of old china to take us back to the age of æstheticism which we thought had died by the satirical pen of Gilbert.

Fashion may be right as regards dress, but let us have no fashion in features. Let us have no ideals that are marred by points which we as surgeons are striving to correct. If this is up-to-date, take us back a little; not indeed to the anæmic heroine whose appearance causes speculation as regards the relative proportion of hæmoglobin and corpuscles circulating through her weakly frame; but anywhere to get away from the ursurper of the heroine's place, that awful creature over-burdened with brain-matter and morbid ideas that render her a fit inmate only for such institutions as that splendid edifice near St. George's Circus—Bethlem—where her wasted talents might find appreciation in the colums of "Under the Dome." D.

Reviews.

The price of books submitted for review should in every case be stated.

The Pocket Gray. Fifth edition. (Baillière, Tindall & Cox.) 3s. 6d. nett.

This work is frankly a cram book, and its brief description of the human frame and of the relations of parts to one another is more of the character of disjointed notes on anatomy than a treatise on that subject. On account of its small size, this book appeals to many men who have to revise anatomy in a short time and at odd moments. The former editions teemed with errors, both clerical and anatomical, but these have been to a large extent corrected. A useful addition to the present volume is a short description of the actions of each muscle. The psoas, we note, is stated to rotate the thigh outwards, but on this point other anatomists differ.

The present edition resembles the preceding, both in size and appearance.

Elements of Practical Medicine. By Alfred H. Gules. Eighth edition. (H. K. Lewis.) 10s.

This work on Medicine is an excellent introduction to the subject, but on account of its extreme conciseness it cannot claim to be more than a book for the beginner. It is well written, and the meaning of the author is always clearly expressed. It has the fault of many of the condensed books on medicine, viz., that treatment is relegated, in many instances, to a very minor position, or is more hinted at than taught by definite statements such as the beginner requires. We note, however, that in the case cardiac of disease, it occupies its proper position, and here rules are laid down with regard to the treatment of contingencies that may arise. The use of castor oil is recommended in the constipation of enteric, but will meet with criticism by many. The weakest part of the book, to us, seems to be the section in Diseases of the Blood and the Glands. The descriptions of the various diseases are extremely terse, and the essential changes in the blood are only touched upon. This forms so important a subject nowadays, both in the wards and examination halls, that a fuller account here would be welcome.

The first number of *The British Optical Journal* has reached us, a monthly journal arranged to impart knowledge and instruction in an agreeable form, at the same time keeping all interested—professionally or otherwise—fully posted up in news relating directly or indirectly to matters optical. We have always felt that the testing of the sight and fitting of spectacles was a matter belonging by right to the medical man; however, he has allowed it to pass into other hands. It is the rule among general practitioners to say to their patients, "I know nothing about eyes, you had better consult a specialist." This method may be applied satisfactorily to wealthy people, but it is the few who can afford the £2 2s. fee to see the specialist in Harley Street when they can, as far as mere refractions go, do almost as well at an optician's for the price of their glasses. Consequently, this source of income has been surrendered by the medical profession to the various opticians. Unfortunately, it is almost impossible in the hospital to interest men in any but examinational subjects. So long as ophthalmology is treated at the various examinations in so cavalier a manner, so long will this subject remain unexplored by the student. Nevertheless, it is a common experience for general practitioners to find that examinational subjects are of little importance in private practice, whereas many subjects on which they are not examined are often more useful.

This journal is well printed on glazed paper, and contains numerous illustrations. The article on "Applied Optics" is excellent and well worthy of consideration. Dr. Drysdale proposes to treat the scientific side of optics as far as possible in an entirely technical manner, and we wish him every success. The other articles are mainly notes dealing with optical matters, astronomical, meteorological, microscopical, etc., and are interesting and instructive.

The Principles and Practice of Medicine. Osler. 4th edition. (Young J. Pentland). 24s.

This work on Medicine has enjoyed a well-earned popularity for several years on account of the amount of material that it contains in a comparatively small size. The book for this reason appealed strongly to those reading for examinations, and no less so to those who had already qualified, because of the lucidity of the writer and the frequency which he has illustrated his descriptions with actual cases.

The new edition has all the good points of the older ones, and has been brought absolutely up to date. The

articles on Dysentery and Typhoid have been re-written, and contain the conclusions arrived at by observers in the South African campaign. The history of Malaria is thoroughly gone into, and all the recent work has been incorporated. Passing on to Yellow Fever, we note that the work in the West Indies of the American and Liverpool Commissions of Enquiry on the causation of this disease is detailed, also that the severe criticisms on Sanarelli's inoculations have been omitted.

Another subject that has received due attention is the outbreak of arsenical poisoning in Manchester.

Many other articles have been extensively altered to keep pace with the times, and the present edition cannot fail to attain the popularity that has been achieved by the others.

Sport.

Rugby Football.

GUY'S v. CROYDON.

This match took place at Honor Oak Park on Saturday, November 9th, in fine weather. Cutler won the toss, and elected to defend the pavilion goal. Croydon kicked off, and play settled in Guy's "twenty-five." From a scrummage, the ball was heeled out; Alcock, obtaining possession, and running very powerfully, gained a good try which was not improved upon. After the "drop-out," Croydon rushed several scrummages, and one of their three-quarters made a good run, several of our forwards making no effort to collar him except Manson, who brought him down well. Two of Harrison's kicks were charged down, and some tackling on the part of Alexander and Walker alone prevented Croydon from scoring. Eventually, after some scrambling play, McEvedy made a good run and scored a try, which was converted into a goal. Before half-time additional tries were gained by Alcock and McEvedy, and Guy's crossed over with the score 1 goal 3 tries to their credit.

In the second half, both Trail and Manson made good dribbles, from one of which Glendinning scored a lucky try, and from the other of which Cutler also scored. Neither try was converted into a goal. Alcock scored twice in quick succession, and McEvedy and Alexander each scored once. Twice did the Croydon backs break away but Walker and Alexander, by splendid tackling prevented any scoring. Just before time Trollop, the Croydon full-back, made a very good attempt to drop a goal, but the ball hit one of the uprights and bounded back into the field of play. Guy's eventually left the field winners by 2 goals 7 tries to nil. Team:—

Guy's.—E. M. Harrison (back); F. Alcock, P. McEvedy, K. B. Alexander and F. E. Walker (three-quarter backs); O. V. Payne and M. C. Wetherell (half-backs); H. A. Cutler (Captain), D. H. Trail, P. T. Manson, A. R. Thompson, R. G. Anderson, B. Glendinning, E. H. B. Millsom, and T. B. Layton (forwards).

Remarks.—Of the full-back and three-quarters little need be said, save that Alexander and Walker showed what can be done in the way of sound tackling, and gave a demonstration in defensive football which might well be taken to heart by every man in the team. We trust that the men whose places they filled at the last moment will take to heart this particular demonstration. Both halves played well. The forwards were good at times, but should realise that they should not only watch with folded arms and open mouths good kicking on the part of the backs, but should make efforts to get within reach of where the ball bounces in order to be ready to assist the backs if they drop the ball, or have their kicks charged down. They ought also to understand that a good dribble is not necessarily dependent upon an individual, but is made much more dangerous if at any rate a majority of the forwards are backing up the dribbler. The heeling-out was as usual mediocre. Whenever the ball was secured by the front row of forwards, those in the back row almost invariably kicked the ball back again or hindered it coming out properly. The forwards must understand that the success of the team depends upon their getting the ball away accurately and cleanly from the scrummage.

Finally, attention must be drawn to the lamentable failures in attempts at landing goals. Accurate place-kicking can be learned by practising, and instead of the score-sheet registering thirty-one it ought to have registered forty-five points.

GUY'S v. BEDFORD.

In spite of fog and frost this match was played at Bedford on Saturday, November 16th.

Bedford kicked off, and Guy's at once began to act on the offensive. The play was chiefly confined to the forwards. From one scrummage the ball came away well, and Lawson obtaining possession, passed to Payne, who transferred to Alcock, who obtained a try far out, from which a goal was not kicked. From the drop-out Glendinning obtained possession, and essayed a drop at goal. The ball, however, never left the ground, and Bedford pressed Guy's for some time. Half-time was called with the score a try in our favour.

In the second half the team, assisted by Cutler and Wetherell, who arrived late, played better, and tries were scored by Alcock after the ball had passed through all the halves and three-quarters' hands. This try, like all the others, was not improved upon.

Tries were afterwards scored by McEvedy, O'Brien and Alcock, and Guy's left the field with the score 5 tries to nil. Our thanks are due to two Bedford men playing for us in the first half. Team:—

Guy's.—E. M. Harrison (full-back); F. Alcock, A. B. O'Brien, M. G. Lawson, R. F. McEvedy (three-quarters); M. C. Wetherell, O. V. Payne (halves); H. Cutler, R. C. Lawry, A. R. Thompson, R. G. Anderson, B. Glendinning, E. Milson, T. B. Layton, and A. M. Tolhurst (forwards).

GUY'S "A" XV. v. BECKENHAM.

This game was played on November 9th, in fine weather at Beckenham, before a moderate crowd. Guy's commenced three short, and played two short all through. In the first quarter of an hour Beckenham, playing five three-quarters, scored a goal and a try. From a combined run by Kynaston and Burney, the latter after evading three opponents scored a try in the corner. Hicks made a good kick but just failed to convert. Prior to half-time Beckenham added another goal and a try.

In the second half Guy's played much better, and were nearly always in their opponents' half. Hicks, after a capital run, scored a try which was not converted, and a little later Cutler got clean away and added a third. During the last ten minutes, Guy's were pressing almost continuously but could not diminish Beckenham's lead.

Result.—Beckenham 2 goals 2 tries (16 points). Guy's 3 tries (9 points). Team:—

Guy's.—E. N. Jupp (back); J. T. Hicks, A. E. King, W. H. S. Burney, H. S. Brown (three-quarter-backs); A. E. Kynaston, F. Cutler (half-backs); K. V. Trubshaw, C. R. Howard, R. A. Scott, M. A. Collins, J. W. Featherstone, W. C. C. Jones (forwards).

Remarks.—The whole team played well, and we should have had a good chance of winning had play been prolonged. Jupp at back kicked and fielded very well, whilst Hicks and Burney were the best of the three-quarters. Kynaston was better in attack, and Cutler in defence. Trubshaw and Collins led the forwards very well, and the "scrum" quite held their opponents. Scott was very noticeable in the loose.

GUY'S "A" XV. v. WESTMINSTER HOSPITAL.

November 16th, at Honor Oak. Not played, owing to fog.

Association Football.

GUY'S 2nd XI. v. ALLEYNE.

Surrey Junior Cup.—Second Round.

A very keen game was played on Saturday, November 9th, at Honor Oak, by the above teams, for the right of competing in the third round of the Surrey Junior Cup.

Winning the toss, and choosing to play with the sun at their backs, Guy's, during the first ten minutes, had all they could do to hold their own. At length, however, the home team settled down, and began in their turn to give their opponents some anxious moments; but it was not till the first half was well advanced that Stewart gave Guy's the lead by scoring the only goal allowed in the match. During the remainder of the half the 2nd XI. continued to have the better of the game, but were unable to increase their lead.

With the opening of the second half it was apparent that Alleyne meant to make a fight for the game and the pace became very fast. The Guy's half-line, however, rose to the occasion, and tackling well saved several dangerous rushes, whilst Leaming at back was also conspicuous for his steady play. The forwards, too, were at times very dangerous and several good shots were put in, one from Peall certainly passed a yard over the goal-line but was not allowed by the referee, who was standing somewhere in the centre of the field. Several corners were forced by our opponents but without any result, and once they netted the ball but the point was ruled off-side. Guy's were next allowed a penalty, but the pot at goal failed. During the last quarter of an hour the light began to fail, and a mist came on which made it rather difficult to follow the ball; the game, however, was keenly contested till the whistle blew, and left Guy's the winning team by 1 goal—love. Team—

Guy's.—S. H. Peatfield (goal); A. Leaming, J. Hogarth (backs); P. Penford, P. Pedrick, S. L. Frankenburg (half-backs); G. B. Harland, S. H. Barlow, B. H. Stewart, R. Messent, P. A. Peall (forwards).

Remarks.—This was certainly the best game the team have had this year, and on the play, we deserved to win. In goal Peatfield saved one or two good shots, but is not as cool as he should be. Leaming at right back was good; but Hogarth was not nearly as safe as his partner, and gave away several corners. The half-back line is the strongest part of the team, and their tackling is good; but they make the mistake of kicking the ball too far in front of their forwards. Individually, all the latter played very fair games; but the line would do much better if there was more passing practised.

Hockey.

GUY'S v. BLACKHEATH A.

This match was played at Blackheath, on Wednesday, November 6th. Guy's scored the first goal, and then Cooper, having the misfortune to break his little finger, Blackheath put on 3 goals while Strange and Gater were off the field attending to him. In the second half each side added 2 goals, and thus Blackheath won by 5 goals to 3. But for this misfortune the scores would probably have been reversed, as Cooper was playing a strong game on the left wing, and our opponents' first 3 goals were scored with three men absent. Team:—

Guy's.—D. Reynolds (goal); A. W. Gater, J. Goss, S. Reynolds (half-backs); F. Morres, B. H. Wedd, A. Morris, S. G. Davies, M. Cooper (forwards).

The "Artists" Rifle Volunteers and Guy's Hospital Rifle Association.

A meeting to discuss the possibility of recruiting amongst Guy's men was held at the hospital on Tuesday, November 12th, Lieut. Scharlieb, of G Company, in the chair. Sergts. Robinson and Viret (the latter being Sergt. of Guy's section) were also present.

Sergt. Robinson stated that the number of recruit drills required is forty. Drills are held from 6–8 p.m., on Tuesdays and Fridays at headquarters. After the first year the minimum number of drills required is ten per annum. In addition to this six consecutive days must be spent in camp every other year. Men who have served in any other corps, including any recognised cadet corps, join as trained men, and are exempt from recruit drills. He also considered that at least six afternoons a year must be spent at Runnemede in order to become efficient in shooting. Every effort is made to suit men's convenience as regards times, etc. The minimum height is 5ft. 6½in., and chest measurement 34in.

Mr. A. Pearson suggested that it should rest with the secretary or captain of the G.H.R.A. to personally recruit amongst junior men, and professed the belief that men needed worrying into doing things, and that circulars were of little use. The U.H.R.A. regulations required that competitors for the Inter-Hospital Cup should be members of some volunteer corps. The Guy's Hospital Rifle Association was sadly in need of members.

Lieut. Scharlieb said there were two reasons why a medical student should join some such corps as the Artists. The first was, that it is the duty of every patriotic able-bodied Englishman to be ready to defend his own country if necessary. With the Channel fleet in the Mediterranean it would be quite easy for France, Germany, or Russia, to land an army anywhere on the East Coast. If every Englishman was an efficient volunteer that army would never leave our shores again, He referred to Switzerland, which, with every man a good soldier, is practically impregnable. The second reason for joining was a social one. Many medical students were hurried from school into the hospitals without the advantages of a university career. For two or three years they were their own masters and answerable to no one. There were many little roughnesses and mannerisms which do not at first matter, but which are a serious drawback in after-life. By mixing with one's social equals and perhaps superiors, and by being under discipline, men learn tact and get the angles knocked off. Their physique also greatly improves with the drill. There was a good club in connection with the Artists (subscription 25s. per annum) and a School of Arms. The smoking concerts were perhaps better than those of any other corps, as the Artists were fortunate in possessing a large number of actors and musicians in their ranks. He referred to the way in which St. Thomas's Hospital were continually winning the Inter-Hospital Cup. The reason was that they possessed a lot of keen shooting men, and that new men as they joined the hospital were pressed into service. He hoped that Guy's men would not remain behindhand in this matter.

A vote of thanks to Lieut. Scharlieb and Sergts. Robinson and Viret concluded the proceedings.

It might also be pointed out that after the first (recruit year) no drills are held during the winter months, so that there would be no interference with football or running.

Appointments.

NAVAL AND MILITARY.

Staff-Surgeon John D. Hughes, R.N., has been appointed to the *Amphitrite*.

Surgeon Sidney Croneen, R.N., has been appointed to the *Alexandra*.

Surgeon John H. Jones, R.N., has been appointed to the *Snipe*.

Captain R. E. G. Phillips, R.A.M.C., is seconded for service with the South African Constabulary.

Mr. F. E. Fremantle, M.B., is appointed Surgeon-Lieutenant in the Herts Yeomanry.

Papers by Guy's Men.

After-care of Cases which have been Operated upon for Perforation of the Stomach. By Hastings Gilford, F.R.C.S.—*British Medical Journal*, November 16th.

Two Cases of Post-operative Thrombosis of the Mesenteric Vessels, followed by Death. By A. Ernest Maylard, M.B., B.S. Lond.—*Ibid.*

A Case of Intussusception in a Patient aged 72; Laparotomy; Recovery. By C. C. Stead, M.B., B.C. Cantab.—*Ibid.*

Notes of a severe and long-standing case of Lupus Vulgaris treated by the application of the X-rays. By G. Hook Rodman, M.D. Durh., M.R.C.S. Eng. Illustrated.—*The Lancet*, 16th November.

Birth.

OSBORN.—On November 11th, at Ennismore House, Dover, the wife of Francis Arthur Osborn, L.R.C.P. Lond., M.R.C.S., of a daughter.

Marriages.

BRYANT—WATTS.—On October 31st, at St. Paul's Church, Cambridge, by the Rev. Dr. Stokes, LL.D., Vicar, assisted by the Rev. L. B. Laurence, M.A., Charles Hillary, third son of E. Ross Bryant, of Newcastle-on-Tyne, to Theodora Harvard Watts, fifth daughter of the late Thomas F. Watts and Mrs. Watts, of Brecondale, Cambridge.

STEPHEN—HUMPHREY.—On the 13th inst., at Christ Church, Brondesbury, by the Rev. C. Dale Williams, vicar of the parish, assisted by the Rev. F. Brooks, Lionel Henry Yorke Stephen, M.R.C.S., L.R.C.P. Lond., youngest son of the late Judge Stephen, of Lincoln, to Alice Rose Humphrey, only daughter of the late J. W. Humphrey, Esq. (Scots Greys), and of Mrs. Furniss, of Beaconsfield, Sheffield.

Death.

PARE.—On November 10th, at Hampstead, Arthur Henry Esmond Pare, the only son of John William Pare, M.D., L.D.S., of 64, Brook Street, Grosvenor Square, W., and the late Margaret Edmondson Pare.

Ed.—D. G. G.

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Calendar of Coming Events.

December, 1901.

Sat. 7.—Messrs. Jacobson and Fripp's take-in; Drs., T. W. Fawssett and R. G. Anderson; Cl., A. C. Ransford.
1 p.m., Clinical lecture by Dr. Washbourn.
G.H.R.F.C., I., Northampton, away.
II., Croydon II., home.
III., Old Charltonians "A," away.
G.H.A.F.C., I., Old Foresters, home.
II., Reigate Priory 2nd XI., away.

Mon. 9.—Cambridge 1st and 2nd M.B. Exams. begin.
1.15 p.m., Clinical lecture by Mr. Laidlaw Purves.

Tues. 10.—12 noon, Mr. Rowell's Demonstration on Anæsthetics.
Cambridge 3rd M.B. Exam. begins.

Wed. 11.—1.30 p.m., Clinical lecture by Mr. Howse.
G.H.R.F.C., I., Royal Engineers, away.

Thur. 12.—Messrs. Howse and Symonds' take-in; Drs., A. P. Pigott and J. Bickerton; Cl., A. Pearson.

Fri. 13.—Application to Medical School Office for Schedules for the Final Conjoint Examination to be made not later than this date.
4 p.m., Meeting of the Dental Society.

Sat. 14.—1 p.m., Clinical lecture by Dr. Washbourn.
G.H.R.F.C., I., London Scottish, away.
II., Rosslyn Park II., away.
III., Kensington III., home.
G.H.A.F.C., I., Cheshunt, away.
II., Townley Park 2nd XI., away.

Mon. 16.—1.30 p.m., Special Clinical lecture by Mr. Howse.

Tues. 17.—12 noon, Mr. Rowell's Demonstration on Anæsthetics.
Exam. in Dental Metallurgy for 1st Year's Prize.

Wed. 18.—1.30 p.m., Clinical lecture by Mr. Howse.
Lectures cease.

Sat. 23.—Messrs. Lucas and Lane's take-in; Drs., K. Anderson and C. H. Robertson; Cl., A. Wylie.

Fri. 20.—First half of Winter Session ends.
Christmas Exams. in Dental Anatomy 1st and 2nd Year's Students.

Guy's Hospital Gazette.

DECEMBER 7, 1901.

A Case of Acute Rheumatism, minute vegetations on mitral valve, streptococci in blood, infective emboli in spleen and brain: death from cerebral hæmorrhage.

CLINICAL LECTURE BY DR. NEWTON PITT,
November 2nd, 1901.

GENTLEMEN,—I propose to-day to discuss with you a very interesting and obscure case which I cited in my last clinical lecture. When discussing the association of disease in the thorax and in the abdomen, I referred to a woman who had been admitted for intense pain in the left hypochondrium, with a rub which was audible in the axilla, and although all we could make out was the pleuritic rub, yet we thought that it was secondary to disease in the abdomen, exactly of what nature we were uncertain. However, it turned out that we were not quite right. The rub was due to friction between an inflamed spleen and the diaphragm, and there was no pleurisy. It is often not possible to be certain whether a rub is due to an inflammatory condition above or below the diaphragm. You may have a case of diaphragmatic pleurisy in which the rub is transmitted down to the upper part of the abdomen, so that it may be audible over the peritoneum, and on the other hand, as in this particular case, although the rub was audible in the axilla, the lesion was entirely confined to the under surface of the diaphragm and to the spleen

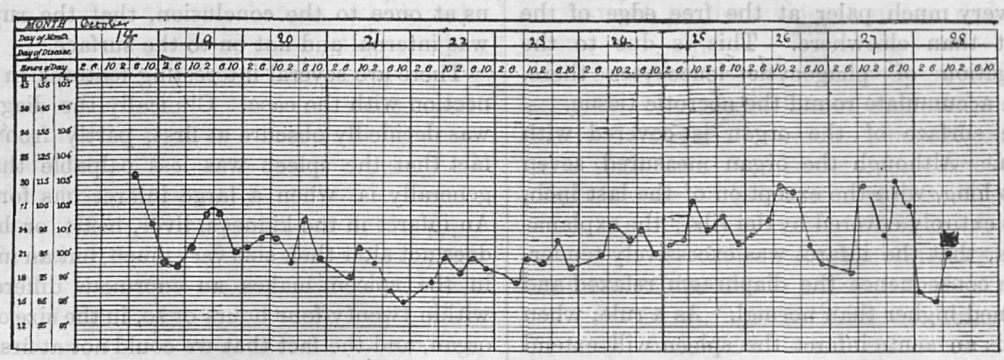
The report is by Mr. Gray. I will first read you a summary of it and then discuss the case in detail. The patient, who was a married woman, æt. 30, was admitted on the 18th of October. She had been married fourteen years, and had six healthy children, the youngest child being two years and four months old. When the patient was eleven years old she had rheumatic fever and dropsy; at twenty-six, when pregnant, she had chorea, but with these exceptions her health has been good; she has

been able to do her household work, and has not suffered from any serious illness. Nineteen years have elapsed since the attack of rheumatism, and four since the attack of chorea. On the 29th of September, about three weeks previous to her admission, she had pain in one wrist. She stayed in bed for a week, and also had pain in her thigh and the calf swelled considerably. She managed then to come up again to the hospital, but was sent back to bed, where she remained for a fortnight until the time of admission, her illness apparently having been a slight attack of subacute rheumatism.

On the 11th October she had a rigor and was taken extremely ill. She had a great deal of pain in left side of the abdomen, near the margin of the ribs, which was very much worse when she took a deep inspiration. On the 15th she vomited and brought up some yellowish-green fluid, and also passed some blood and mucus from the bowel. She was sent up to the hospital as a case of intussusception, the doctor, who saw her now for the first time, being under the impression that the resistance that he felt in the left hypochondrium, might possibly be due to an intussusception; the vomiting, together with the presence of blood and mucus in the motion, having probably suggested the diagnosis to him. The bowels had not been opened since the 15th of October, that is to say for three days. The tenderness in the left hypochondrium steadily increased. When admitted into the hospital, we noted that the patient was a well nourished woman, who obviously had enjoyed good health previously. There was no evidence of any chronic disease and no marked evidence of any toxic condition. She referred her pain to the tip of the eleventh left cartilage. Provided she did not move she did not suffer from great pain. On examining her, there was no definite tumour to be felt, but simply an increased resistance in that region. On percussion the thorax gave dulness in the axilla up to the sixth rib, behind up to the angle of the scapula, and in front up to the nipple. The normal area of resonance lying internal to and below the nipple line was replaced by dulness. On auscultation, the breath-sounds at the left base were deficient, and a rub was audible in the axilla and behind. Her tongue was furred, her breath slightly foul, and the bowels, which were opened shortly after admission, contained a large piece of mucus slightly blood-stained, but no free blood, otherwise the motion was normal.

On examining the abdomen, there was nothing special to be noticed beyond the increased resistance below the margin of the thorax on the left side. There were no spots and no general distension, the rectum was normal, and there was nothing in any way pointing to an intussusception. The urine was normal. The cardiac impulse was in the nipple line 1½ inches below; and the cardiac dulness was not increased either upwards or to the right. There was a systolic murmur, and there was another murmur in the diastolic interval which did not run quite up to the first sound. It was very difficult to come to any positive diagnosis, but we came to the conclusion that she had no intussusception, but probably some local inflammatory condition in the region of the left hypochondrium, with an infection of the pleura. Whether in connection with some gastric ulcer, or whether there was an infarct in the spleen, we could not decide. Mr. Gray examined her blood, which he found contained 22,000 leucocytes to the c.m.m., clearly showing that there was some infective condition.

The patient remained fairly comfortable, and her condition on the 23rd, four days after admission, was decidedly better. She could sit up and allow you to examine her, and did not seem very ill, but if she moved she complained of pain. She scarcely ever lay on her left side, but almost invariably preferred lying on the right. At that time we did not think her condition excessively grave. On the 23rd, or perhaps the day before, we noticed that the spleen was definitely palpable. The margin of the spleen was hard, was not particularly tender, and it extended beyond the margin of the ribs; by the 26th or 27th it extended rather more than one inch beyond the margin of the ribs. The rub perhaps became rather less definite, the absence of breath-sounds behind, and the dulness still persisted; sometimes there was distant bronchial breathing. We still remained uncertain as to the nature of the disease up to



the 28th. During this time her temperature had not been exceptional, it had only once reached the normal, but it had only been slightly raised. On the 27th, however, the temperature went up rather suddenly to 103°, and again dropped. There had been nothing else to suggest any ingravescent trouble, but on the morning of the 28th it was noticed that the patient had changed a good deal during the night. Mentally she was dull and apathetic, and was wandering in her talk. Her temperature was 103°, but the cause was not obvious. At 11 o'clock she suddenly became comatose; this was preceded by a period of excitement which lasted for a few minutes. Her pulse, which had previously been 100, had now dropped to 64, the respiration became stertorous, her face cyanosed, and the left pupil widely dilated. Within a few minutes both pupils became widely dilated, the respiration more feeble, until it stopped, her heart beat a short time longer, but the final process did not occupy more than ten minutes. There was no muscular twitching, no localized paralysis; her optic discs were normal.

It was now clear that the patient had had infective endocarditis, because there is hardly any other condition, except a ruptured aneurysm, which, in a young, healthy woman, will produce sudden pressure on one side of the brain, and spreading to the other prove fatal within a few minutes. Cerebral hæmorrhage in young people is due either to a glioma, which during its growth generally gives rise to some symptoms previous to the hæmorrhage, or to a ruptured aneurysm; and it is very remarkable, that a considerable proportion of the aneurysms that form within the cranium, do not give rise to symptoms until they rupture.

The blood was examined an hour before death, when the leucocytes numbered 35,300 to the c.m.m. With regard to the leucocyte count, it is very important to make a series of blood-counts, as when the number of leucocytes is on the steady increase it indicates a spreading inflammatory process.

I will now refer to the condition found at the post-mortem examination, and then discuss some of the more interesting features of this case. The most striking change was in the spleen, the appearance of which, unfortunately, has now altered considerably. It is much enlarged, weighing 22½ ounces. One half of the organ, at least, is occupied by infarcts; there is an infarct at the upper end, and a very large, firm, dark-red infarct occupying all the lower half. The portions occupied by the infarcts have undergone coagulative necrosis, and therefore the spleen is much firmer and denser than normal; while the margin of the infarcts show, or did show, a thin strip more anæmic in appearance, than that presented by the rest of the organ. This large one is a red infarct, whereas the smaller one at the other end is white. The spleen is one of the few organs in which both red and white infarcts form.

It is frequently found that the size of an infarct only corresponds to part of the volume supplied by the occluded artery, as the whole does not undergo anæmic necrosis. If you look at the surface of this spleen you will notice that

it is very much paler at the free edge of the infarct than elsewhere. This is due to the aggregation of phagocytic leucocytes there, which accumulate round the necrotic tissue.

The surface of the organ is covered with lymph. Although the organ measured seven inches long, with the exception of the last inch, it was entirely covered by the ribs; the explanation is, that the infarct was excessively tender, and in consequence the diaphragm relaxed and remained higher than normal. As a rule, when there is an acute infarct the spleen will extend some three inches below the margin of the ribs, and be readily felt. Owing to the diaphragm being so high, there was a large amount of collapse of the base of the left lung, but not much inflammatory change.

Having come to the conclusion that we had a large infarct in the spleen and a ruptured aneurysm, we naturally assumed that we should find a fungating condition of the cardiac valves. However, on cutting open the heart it was found that there was running along the mitral valve a fringe of minute vegetations, no larger than those met with in a typical case of acute rheumatism, and quite different from those we associate with an infective endocarditis. The valve was slightly stenosed, and the curtain thickened as the result of the rheumatic fever many years previously. The blood taken with antiseptic precautions from the right auricle was found to contain streptococci. Although the appearances of the heart were such as would be put down as characteristic of rheumatism, undoubtedly streptococcal infection had taken place, and was responsible for the changes that had taken place, and for the formation of the infarcts.

The brain was found to be greatly distended with blood. It has not yet been thoroughly examined, but an aneurysm has probably formed on one of the internal arteries and has ruptured into the lateral ventricle. The blood flowed from one ventricle into the other, and rapidly killed the patient. We had been uncertain whether the aneurysm had ruptured on to the surface or into the ventricles. The consideration that there had been no twitchings nor convulsions of any kind, perhaps ought to have led us at once to the conclusion, that the rupture was internal and not on to the surface.

There are several interesting features in connection with the case. Clinically the diagnosis was decidedly obscure at first, partly from the fact that the spleen was less palpable than it generally is, when a large infarct has formed. An infarct in the kidneys, liver, heart, or brain, does not alter their size very much, but an infarct in the spleen makes an enormous difference, within twenty-four hours or so, in the size of the organ, and the fact that we could not at first feel the spleen made us doubtful whether there was an infarct, although we discussed the question.

The next feature was, the condition of the heart did not during life suggest fungating endocarditis.

Thirdly, there was a ruptured aneurysm, the formation of which had taken place without presenting the slightest symptom. This may undoubtedly happen. Cerebral aneurysms vary very much in size. Here are several specimens which illustrate their characters and mode of formation. The formation of cerebral aneurysms is a subject which only has been fully discussed within the last few years. Mr. Morrant Baker was the first, some forty years ago, to point out that in some cases presenting multiple emboli, cerebral aneurysms were found. But I do not know that very serious attention was paid to the matter until Dr. Goodhart in 1877, and Mr. Bowlby in 1887, collected a large number of cases and made it quite clear that infective emboli are capable of setting up changes in vessels which may lead to the production of aneurysms.

The aneurysms that form in the substance of the brain may reach the size of an inch or two before they rupture, but when they occur at the base of the brain, in the circle of Willis, they often rupture while no larger than a pea. It is exceptional for the sac to be filled with clot, as what generally happens is, that the embolus is, as a rule, arrested by the bifurcation of a vessel; in many cases it does not completely fill the lumen. The proliferation of the cocci in the embolus set up a further thrombosis with engorgement of the wall of the vessel, which becomes infiltrated with leucocytes. The

infective inflammatory changes which take place in the wall generally cause it to yield on the proximal side of the thrombus, as this is the part which is subjected to the greatest pulsating arterial pressure. When the thrombus is very infective, it is not at all infrequent for it to soften and disappear altogether, so that at the post-mortem, it has passed on into the distal vessels and there is no trace of it left.

Similarly, aneurysms may form on other arteries of the body, such as the popliteal, or in the arm. As a rule the emboli are very small, and if they are carried on to the extremities they involve such small vessels that the tissue is able to support the pressure, and no aneurysm is formed, but petechiæ develop. It is only when the embolism rests in some place where the surrounding tissue does not exert a pressure at least equal to that in the affected vessel, that the aneurysm forms or is discoverable.

We are still very ignorant as to the ætiology of acute rheumatism, but all the evidence shows that the process is almost certainly an infective one. Nevertheless, although a great many examinations have been made, as to the presence of micro-organisms in cases of acute rheumatism, whether in fluid taken from aspirated joints, or from the pericardium, or from the cardiac blood after death, they have almost invariably given negative results; and in those cases in which organisms have been found, they have by no means always been of the same kind, and even at the present time, although several papers on the subject have been published during the last two or three years, the general opinion of bacteriologists is that the question is still entirely open. The case to-day is one of acute endocarditis, but streptococci were found in the blood and the emboli from the vegetations infected and killed the patient.

Clinically, there are many varieties of fungating endocarditis.

A. In the most malignant form there are large masses of soft vegetations on the valves, which produce a markedly toxic state and readily break off, so that the patient presents the appearance of typhoid fever, or of a general pyæmic condition; while multiple minute emboli are carried to the kidneys, spleen and elsewhere.

B. In other cases the vegetations, although large are very much firmer, and the patient may live six, eight, or ten months, sometimes a year, with periodic attacks of pyrexia, with a large amount of poison thrown into the circulation at times, but very often with quiescent periods in which the amount of intoxication is comparatively slight.

C. In the slighter varieties the vegetations are only moderately large, and there is undoubted evidence that some of these cases recover. We had a case in Stephen Ward a few weeks ago, of a boy who had apparently recovered from pneumonia. After a few days his temperature rose again, and he had slight pyrexia for a prolonged period; at the same time we noted the sudden onset of a musical systolic bruit over the tricuspid valve, which persisted for weeks but finally cleared up, and the boy has gone out perfectly well. There is little doubt that in his case there was a pneumococcal infection of the tricuspid valve which has since quieted down.

It is very exceptional for minute vegetations, which on the mitral valve of this woman were no larger than pin heads, to set up infective emboli. It is open to discussion as to whether this is a case of acute rheumatism in which streptococci were present in the blood, or whether fungating vegetations would have developed if the patient had not died. It may be that it was an early stage in which the fungating vegetations had not yet developed.

The process is as follows: The valves are composed of fibrous tissue richly supplied with lymphatics but not with blood-vessels, and their surface is covered with an endothelial layer. They are nourished by the lymph which passes by osmosis into the lymphatics. When organisms are circulating in the blood, they may pass into the lymphatics and proliferate, leading to the formation of vegetations, with degeneration of the endothelium over them, and to the formation of fibrin on the damaged surface of the valve.

The blood clot tends to accumulate on these damaged areas, and being carried to and fro by

the blood currents injures adjacent points on the surface of the endocardium, where further clotting will take place. In this way masses of clot, infected with organisms, and therefore extremely unstable and friable, are developed, and may, in the worst cases, reach a considerable size.

No formation of any fibrin had taken place on the surface. Apparently the condition had lasted for a week, at least, and this would be sufficiently long for the endothelial surface to be destroyed. All that was found was a number of minute vegetations.

The diagnosis of infective endocarditis.—As a rule, there is evidence (1) of an abnormal condition of the heart; (2) of a pyæmic condition of the patient; and (3) of the presence of emboli.

1. The condition of the heart. There are some cases in which you can be quite certain that you are dealing with an infective endocarditis. If you listen to the heart and find no evidence of aortic incompetence, and if within a week aortic incompetence is well established, there is no other possible cause but a fungating endocarditis. If you find the bruits vary in character—if one week they are musical, and the following week they have altered in character, that is very suggestive. You must, however, bear in mind that mitral stenosis is exceptional, as the bruits frequently alter quite suddenly; and may be prestolic, or mid-diastolic, or the heart's action may merely be irregular and no bruits be audible; on different occasions within a very few minutes.

2. As a rule the temperature is of the hectic type, with great oscillations. Rigors are always present in the more severe forms, the patient emaciates and becomes profoundly anæmic. Moreover, in the more severe forms you almost invariably find petechiæ in the skin, hæmorrhages in the retina, and very often blood in the urine.

3. The presence of more than one embolism suggests an infective process. It is generally accepted that it is impossible to have an infective endocarditis when the number of leucocytes is normal. In this case we had at first 22,000, and later on 35,000 to the c. m.m., which numbers were quite compatible with an inflammatory infective condition. But there was nothing whatever in the heart-sounds which was at all suggestive of an infective endocarditis. The only thing which aroused suspicion was the enlargement of the spleen, and we were in doubt as to the cause.

Cause of pain resulting from an infarct in the spleen.—If you experimentally ligature the superior mesenteric artery, in a short time a most intense colic is set up, the intestines become contracted and anæmic, but later on they become intensely engorged. A similar condition occurs when the splenic artery is blocked; one result is to set up a violent muscular contraction of the trabeculæ in the spleen, and there is very little doubt that this is one of the reasons why a splenic infarct is so painful.

Another is that there is no other condition in which there is such a sudden increase in size. The spleen in this particular case weighed twenty-two and a half ounces, whereas a normal spleen weighs about five ounces. It had increased nearly five-fold in weight and in size. The capsule round the spleen is tough, so that the sudden increase in the organ would be a sufficient cause for a considerable amount of pain. Local peritonitis also took place as a result of the infection of the spleen, and was the third factor in the production of the pain.

In the majority of the cases the enlargement of an infarcted spleen is so marked as to be very readily felt. I have felt a spleen reaching down beyond the umbilicus, having increased to this size within three or four days, as the result of an infarct. Therefore the spleen may be very large, as much as three times the size of the present one.

On the formation of infarcts.—An infarct is a volume of coagulative necrosis due to the cutting off of the blood-supply to that part. For its formation it is necessary not only that there be necrosis, but also that the parts be bathed in coagulable lymph. Hence, in the brain and spinal cord, where there is no coagulable lymph, the necrotic masses are soft and diffluent, and in the extremities, the absence of adjacent healthy tissue to supply lymph, accounts for their absence in these parts, the change being the

production of gangrene. An infarct may be anæmic, or in some cases there may also be hæmorrhage into it.

White anæmic infarcts occur in the kidney; in the lungs and intestines they are hæmorrhagic, and in the spleen they may be of either variety. The production of the red hæmorrhagic variety has always been difficult to explain. The view generally held until lately, and which was put forward by Cohnheim some thirty years ago, but which has now been proved to be quite erroneous, is as follows:—When an artery is occluded, the nutrition of the vessel walls is impaired; they consequently dilate, and the blood regurgitates back from the veins. This can be shown to be wrong, by ligaturing an artery and noticing the amount of infarction which takes place; then if the corresponding vein be ligatured the amount of the infarction will be enormously increased. Again, if you first ligature the adjacent arteries, and then the one you wish to study, the resulting infarct is an anæmic one, although the vein is left untouched. It is now clear that the blood comes from the adjacent arteries, and the production of a hæmorrhagic infarct depends very largely upon the amount of the venous pressure. When this is high, hæmorrhage tends to take place. When an artery is ligatured, the circulation in the vessel near the ligature slows down or ceases, but that in the adjacent branches soon becomes more rapid, and gradually these vessels dilate and help to supply the starving tissue. As soon as the blood-supply of a tissue is defective, the lymph stream from the capillaries is increased, and consequently the capillary pressure falls, hence the blood flows more rapidly to that capillary. The corresponding vessel dilates, as Thoma has shown, that one of the first results of an increased velocity, is an increase in the diameter of the vessel. Hence the increased velocity of the blood-stream, and the dilatation of the vessels adjacent to an occluded artery, are the direct effects of the starvation of the tissue, and are determined by the change in the tissue and not by any change in the blood-pressure in the adjacent vessels, nor by change in the walls of the vessels in the affected areas.

It is essential for the continuance of the circulation in a capillary, that the pressure be pulsatile, as otherwise the red cells aggregate in masses, and the circulation ceases. This is an important factor in the production of the hæmorrhage.

The Residents' Dance.

On Tuesday, December 3rd, the Residents entertained about 150 guests in the Governors' Court-room at a ball, which has been voted by everyone present an unqualified success. Mrs. Cosmo Bonsor, who very kindly acted as hostess, received the guests with her wonted charm.

The Residents, all of whom acted as stewards, were most indefatigable in the performance of their duties, with the result that after the one or two preliminary dances had been played, all had their programmes full, and were ready to enjoy dancing on a good floor to the music of an excellent band (the London Viennese).

The sitting-out rooms were mostly in Dr. Perry's house, and the thanks of all are due to Mrs. Perry for so kindly lending them. Without them the dance would have been almost an impossibility.

The refreshments, which included pheasants sent by Mr. Cosmo Bonsor, and which were spread in the room adjoining the Court-room, were of the best.

A smoking and card-room was provided downstairs, but owing to the attractions upstairs there was only an occasional indulgence in the all-prevalent epidemic, "bridge."

Among others present were Mr. and Mrs. Cosmo Bonsor, Mr. and Mrs. Howse, Dr. and Mrs. Taylor, Dr. and Mrs. Stevenson, the Matron, Assistant Matron, and several of the sisters. Several other members of the staff were also present.

The guests left at about one o'clock, and a very pleasant evening was terminated by the singing of "God save the King."

The Residents are to be sincerely thanked for the pleasant evening, and congratulated on their success.

Pass List.

University of London, October, 1901.

M.B. EXAMINATION.

First Division.—J. Atkins, H. C. Keates, J. F. Northcott, W. M. Robson, K. V. Trubshaw.

Second Division.—K. B. Alexander, R. Balderston, W. H. Bowen, H. W. Brown, M. Coplans, B. W. Moss, W. G. Parker, W. B. Secretan, D. W. Smith, L. E. Stamm, C. Tessier, A. J. Wernet, F. C. Wetherell.

In Lighter Vein.

We lived in a state of concentrated bliss, breathing an atmosphere humid with brotherly love and affection. No angry passions ruffled the ocean of our mutual respect and admiration. We walked in the courts of Guy's as friends; until, alack, the day some idiot suggested Theatricals.

Ah, dear reader, have you ever participated in private theatricals. Let us hope not.

Like as war devastates a country, as plague paralyses society, even so do theatricals utterly and entirely decimate the domestic hearth.

When it was first suggested every one was very keen. It was after the distribution of the parts that the trouble began. Every one *said* they did not mind how small their part was—of course, every one *thought* that they ought to have the lead.

This is the kind of thing that goes on:—

(*Scene.*—The Charity Room. A rehearsal about to start. Several men lounging about; some learning their parts, others talking. Stage manager trying to get a start, and rapidly losing his temper).

S. M.: "Now then, you chaps, let's get at it, or we shall be here all night; now then, where's Fanny?"

Fanny (in very gruff voice): "All right, old cock."

S. M.: "Now, enter Fanny, looking rather shy." (Fanny does so, and falls heavily over leg of piano).

Fanny: Oh, I am so shy and modest ——"

S. M.: "My dear boy, that'll never do. You must remember that you are not playing a policeman's part."

Fanny (angrily): "Look here, I'm doing my best. You'd better get someone else. I told you my voice was too heavy."

S. M.: "My dear chap, you'll be splendid."

Fanny (trying again): "Oh, I am so shy and modest." (Enters lover).

Lover: "How fragile she looks!" (N.B.—F. weighs 12st. 6lb.). "What will she say to me?"

Porter (putting his head in door): "You are wanted in the front at once, sir."

S. M.: "Well, I suppose you'll have to go. It's sickening. We'd better go on to page 7).

(Enter Comic Man).

C. M.: "I say, you know, I don't feel quite at home in my part yet; but I'll do my best." (Is woefully pathetic).

S. M. (encouragingly): "A *little* more light, I think; if I may be allowed to suggest."

C. M. (hurt): "Didn't I tell you I wasn't certain about my words, so how can I let myself go. It's enough to make a man chuck his part the way you go on."

[*S. M.* proceeds to pacify *C. M.* By the time this is accomplished three other men have been called away by the porter.]

S. M.: "It's most disheartening, really. We'd better go on to page 17, and try that bit where Fanny faints."

(Fanny proceeds to faint. The result is that two of the cast are severely injured, the furniture of Charity's room is ruined, and the stage manager is reduced to a state of dementia. It is resolved to abandon the rehearsal. Every one sulkily remarking as they go off that they suppose it will be all right on the night).

THE BIRD OF PREY.

Smoking Concert.

The first Smoking Concert of the season was held in the Dining Hall on Saturday, November 30th, and proved to be an unqualified success. Mr. A. W. Ormond undertook the difficult task of arranging the programme, and to him a large part of the credit is due for the excellent entertainment. With the idea of discovering and fostering any musical talent in the hospital, only actual Guy's men were asked to appear, and the success in finding hitherto unknown performers will warrant this precedent being followed in future years.

The President of the Residents, Mr. French, took the chair promptly at eight o'clock, the hall being full, and called on Mr. Wylie for a pianoforte solo, which was well rendered and met with the hearty approval of the audience. Mr. McD. Parrott sang "Take a pair of sparkling eyes" in his usual good style, and was followed by Mr. Wacher with "When I marry Amelia," the chorus of which was much relished by the audience, and loud calls for an encore resulted in the singer giving another verse after a short dissertation on the way the

chorus should be rendered. Mr. Ray Edridge, a debutant at our concerts, gave a recitation from "Bleak House." Although the subject was more suited to a drawing-room entertainment, Mr. Edridge delighted the audience with his clever elocution and his effective impersonation of the various characters, that he was greeted with clamorous approval on the completion of his recitation. Mr. Claxton sang "A capital ship," the whole song and chorus went with the swing that is so essential in this class of song. The next item was a 'cello solo by Mr. Winckworth, and was so good that he had to give an encore and played Elgar's "Salut d'Amour," much to the delight of everyone. A really good performer has been discovered in Mr. Winckworth and we hope that we may hear him often.

Mr. Woodward was quite the star of the evening, and his "Slight imitations of Mrs. Patrick Campbell" took the house by storm. His imitations of Mr. Tree before the curtain and as Mark Anthony were not quite so happy, but the three were so good that he was encored loudly, and at the termination of "A speech by an Irish member," the letters of the alphabet forming an excellent subject, was so loudly applauded that he had to recite again, and after an apology that was not needful, gave a spirited rendering of "The Artist."

Mr. Faulks sang "I fear no foe," but did not sing again, much to the regret of the audience, who called loudly for an encore. The first half of the programme was concluded by a banjo trio, and the rendering of Sousa's "King Cotton March" was so good that the President called on the performers, Messrs. Campkin, Cook and Taylor, for an encore. They are all junior men and are a decided acquisition to the musical talent of the hospital.

After the interval, Mr. Gerald Ticehurst played a selection from "The Mikado," the various airs of which being well known to the audience were the more appreciated.

Two part songs, unaccompanied, were given by Messrs. Wyatt, Greenfield, Goss and Tipping, and were well received. Vocal quartettes are a new feature in our concert, and we hope that we may have more in the future. Mr. P. P. Cole played an excellent violin solo, and Mr. Griffin sang, "I live underneath," the chorus of which shewed how well the audience appreciated his efforts. Mr. Ray Edridge recited "The Desert Island," and was followed by Mr. Atkins with, "I want to be a military man," and the chorus was simply wonderful in volume.

Mr. Soper played a violin solo, and although he is leaving the hospital we hope to often have him amongst us at future dates. Mr. Woodward appeared again and gave a good burlesque of the tomb scene in Romeo and Juliet, one of the senior charities, under a table cloth, forming an admirable and beautiful corpse. Mr. Wacher sang his song, "Nice gal Susie," with his usual verve, and the programme was at an end and God Save the King was sang.

During the evening Messrs. Bowle and Greenfield acted as accompanists, and Mr. Taylor, the conductor of the Glee Club, most ably filled a vacancy caused by the absence of Mr. Holmes.

Mr. French proposed a vote of thanks to Mr. A. W. Ormond for his trouble in arranging the concert, and Mr. Ormond replied.

Mr. Cutler with his blushing honours (mostly ecchymosis) thick upon him from the Blackheath match, rendered the thanks of the audience to the President for taking the chair, and after prolonged cheering the meeting broke up.

Nursing News.

Matron's Office.

Miss Blanche Holman, Sister Job, who entered the hospital as a paying probationer, in November, 1898, has been appointed Assistant Matron. Miss A. Davidson, Sister Cornelius, has been transferred to Job, and Miss Edith Lewis, Sister of the Isolation ward, has been appointed Medical Night Sister.

The following temporary appointments have also been made:—Mrs. Strathern, who has been acting as Medical Night Sister for some months, has been appointed Sister of Stephen ward; Miss Anson, Sister of Martha ward; Miss Maud Martyn, Sister of Charity ward, and Miss Rebecca Daniell, Sister of Cornelius ward.

On December 2nd, Nurse I. Wood (Head Nurse in Luke ward), who completed her training in March last left the hospital, having received the appointment of Sister in the Pretoria Hospital, South Africa. Probatiorer Yates has been appointed to succeed her as Head Nurse in Luke.

Chapel News.

Preachers during advent.—Sunday, December 8th, at 7 p.m., the Rev. L. A. C. Allen, St. Michael's, Walthamstow. Sunday, December 15th, at 11 a.m., the Rev. G. Weigall, Chaplain of St. Thomas' Hospital.

Wednesdays, at 8.15 p.m.—December 11th, the Rev. E. F. Russell, St. Alban's, Holborn. December 18th, the Rev. S. M. Taylor, Canon and Precentor of St. Saviour's.

Appointments.

CIVIL.

Parry, L. A., F.R.C.S. Eng., B.S., M.D. Lond., has been appointed Assistant Surgeon to the Sussex Eye Hospital, Brighton.

MILITARY.

Major S. O. Stuart, F.R.C.S., R.A.M.C., has embarked for South Africa.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

Testimonial.

DEAR SIR,—I wish, through the medium of your columns, to express to all those Dental Students, past and present, how heartily I thank them, and appreciate their kindness in so generously giving me such a handsome testimonial.

Trusting you will kindly insert this in your next issue of the GAZETTE.—I am, yours faithfully,

C. J. HINCHLIFF.

Westbourne,
Selhurst Road, South Norwood, S.E.
December 4th, 1901.

Reviews.

The price of books submitted for review should in every case be stated.

A Text Book of the Diseases of Women. By Henry J. Garrigues. Third edition. (W. B. Saunders & Co.), Philadelphia. 18s. nett.

This book is an excellent treatise on gynæcology, and is of a sufficient size for the more advanced student.

Throughout the subject is treated in a concise and masterly way. Illustrations are numerous, and, as in most American scientific works, extremely good. The anatomy of the female pelvis and its organs is most fully dealt with in the first part of the book, following an excellent account of development of the genitalia.

Treatment, both generalized and individual, occupies a very prominent position, and is one of the strongest features of the work. Some of the descriptions of actual diseases are somewhat scanty when compared with the voluminous accounts in other text books, but this failing in not present as regards accounts of operations, which are of sufficient length and almost invariably well illustrated,

The various instruments required in operating are described as well as their use, and looking at the pictures the student may get a better idea of them than is usual with most men. The production of the book is in keeping with the style that pervades its reading matter.

The Practical Nursing of Infants and Children. By Frank Cole Madden. (Cassell & Co.)

This is an excellent little book on the subject, and teems with practical points on which men, even though they have finished their appointment, know only too little. The details which go to make up a good knowledge regarding the treatment of children, are often not taught in the wards, and unless a student is exceptionally painstaking, he may miss acquiring them, particularly in a general hospital. The author embodies in this work his knowledge acquired while Medical Superintendent at the Hospital for Sick Children, and gives a short account of the various parts and their functions before going into practical points in nursing.

This book we confidently recommend to nurses or men who wish to acquire special knowledge on the subject.

Anæsthetics: A Practical Guide to the Administration of. By R. J. Probyn Williams. (Longman & Co.). 4s. 6d. net.

Although there is no end to the books written on this subject, this book may lay claim to a place among the books ordinarily read, on account of its handy size, and the excellent and clear style in which it is written. It contains plain advice on the administration of anæsthetics and is not made too bulky, with lengthy accounts of the history and of the many experiments made on this subject, which, although not devoid of interest, can only be read by those specially interested in the subject.

By an unfortunate mistake in our last issue, which we much regret, the name of the author of *Elements of Practical Medicine* was printed incorrectly. The author is Dr. Alfred H. Carter. This book, price 10s. 6d. is published by H. K. Lewis.

From the Gazette's Special Pathologist.

ALL specimens—particularly those of solid tissues—should be accompanied, if possible, by a short clinical and post-mortem history, and a postal order for 2s. 6d. An extra charge of 6d. per slide is made when prepared sections are to be forwarded.

Diphtheria specimens are to be labelled *Immediate.*

Postal Orders to be made payable to Mr. C. H. WELLS.

NOTICES.

H., REIGATE.—No tubercle bacilli were found in the specimen marked No. 2.

H., REIGATE.—The tubercle bacillus was not found in this specimen of sputum.

Papers by Guy's Men.

A Case of Purpura following Diphtheria. By E. W. Goodall, M.D. Lond.—*Lancet*, 30th November.

The Symptoms and Treatment of Movable Kidney. By H. Morris, M.A., M.B. Lond., F.R.C.S. Eng.—*Ibid.*

The Symptoms and Treatment of Perigastric Adhesions. By W. Hale White, M.D., F.R.C.P. Lond.—*Ibid.*

Sulphur in the Treatment of Dysentery. By G. E. Richmond, B.A., B.Sc., M.B., B.S. Lond.—*Ibid.*, 23rd November.

Passim.

The Residents are to be heartily congratulated on the dance they gave on Tuesday last. It was an unqualified success. The band and floor were excellent, and, most important point, every lady had a full programme. The Court room, thronged with fair women and brave men, was quite robbed of its usual official gloom. There was only one fault, the dance was all too brief. How sad to think that the Court room has once more assumed its solemn aspect!

"To-night the moon that watched our lightsome wiles—
That beamed upon us through the deodars—
Is wan with gazing on official files
And desecrating desks disgust the stars."

Again, with Kipling we feel incline to cry—

"Nay! by the memory of tuneful nights,
Nay! by the witchery of flying feet,
Nay! by the glamour of fordone delights,
By all things merry, musical and meet—
By wine that sparkled, and by sparkling eyes,
By wailing waltz, by reckless gallop's strain,
By dim verandahs and by soft replies,
Give us our ravished ball room back again."

Last Saturday's smoking concert was quite one of the best that has been given at Guy's for some time past; Mr. Ormond is to be congratulated on the success which attended his efforts in getting together such an excellent programme. Though in a sense it was only a kind of trial trip, it showed most emphatically that there is nothing like relying on the talent of our own men to produce a really enjoyable smoker. In many ways the introduction of professionals is a debatable benefit; certainly new men are less ready to come forward when they can be amused without any personal effort.

The *St. Thomas's Gazette* for November reproduces in *facsimile* a copy of a *brochure* written in 1823 by the students of the then united Borough hospitals, St. Thomas's and Guy's. It purports to be an account of certain "valuable publications and rare and curious articles" to be sold by Mr. Nicholas Knock-'em-down. It need hardly be said that the descriptions of the lots contain "*hits*" at various members of the Staff of that day. Of course such institutions as clinical lectures and the Physical Society at Guy's are not spared from their share of sarcasm. The point of many of the jests has become obscured by time, but an "apparatus criticus" which the *Gazette* has prepared throws light on many of the witticisms, and altogether a most interesting article has resulted.

A cutting from the *Adelaide Observer* of Oct. 5th, 1901, has been sent to us recording the sad death of an old Guy's man, Dr. E. Willis Way. His death was extremely sudden, in fact at the time he was operating at his private hospital, North Adelaide, when he called out to Professor Watson, "Here, Professor, come quick," and falling to the floor, he practically died at once. He entered Guy's as long ago as 1865, and after qualifying he went to the Edinburgh University; whilst there he held several appointments, amongst them resident surgeon at the Royal Infirmary; later he returned to South Australia, where he soon had a large practice and occupied a prominent public position. He was accustomed to periodically visit Europe to keep up with all the recent developments and improvements, and his reputation as a surgeon seems to have been very widespread.

The next issue of the Gazette will, in a humble way, partake of the nature of a Christmas number; the picture of "The Old George Inn" unfortunately will not be ready to present with it, the recent fog, "wet, heavy, universal, as if all the fens in England belched out their vapours," made sketching an impossibility, delaying the artist in her work, and the production is still further delayed owing to stress of work at the printers.

A number of the *Macclesfield Courier* has fallen into our hands containing a copy of a cartoon on the subject which has been agitating the town—the election of a lady house-surgeon to the Infirmary. The medical staff are represented as six rude little boys, with their noses turned up, wearing a general air of supercilious superiority, while the lady appears as a charmingly unsophisticated maid in a poke bonnet; the picture bearing the legend, "You shan't play in our yard." Were we going through the fiery

ordeal of a silly season, striving to make bricks without straw, it would be a grand opportunity to fan into flame a discussion on this question, but with Christmas so near silence seems the better policy.

Sister Out-Patients wishes it to be known that she will be glad as soon as possible to receive the collecting cards and packets of clothes intended for the Christmas Tea, for which we made an appeal a few weeks ago. It would greatly simplify matters if they could be sent in before the 15th instant.

The new editors of the *Guy's Hospital Reports* are certainly keeping up the pace they set themselves in publishing their first issue last summer, for we are glad to say the fifty-sixth volume is now in the press, and they hope to publish it either at the end of this year, or certainly at the beginning of the next. Further, there is every prospect of another number being ready by next July.

All Guy's men will be delighted to see that two members of the present Staff, Mr. A. D. Fripp and Dr. E. C. Perry, have been placed on the permanent advisory board for the supervision of the Army Medical Service. We most heartily congratulate them on this honour.

From a notice issued by the Medical Officer of Health for Woolwich, it appears definite arrangements have been made in that borough for the notification of phthisis. The most important result of this will be the opportunity given for taking active steps to prevent the spread of the disease, such as giving the members of the family directions how to nurse such a case, providing disinfectants for spitting cups, and thoroughly cleansing the room after the removal of the patient.

Although we were on the losing side against the Old Merchant Taylors, the result was in no way discreditable to our team. The game throughout was extremely close, and curiously enough turned, as we hinted it might in our last issue, on the failure of a place-kick, leaving us losers by eight points to seven. The team played extremely well at times, but slacked off at intervals, putting our defence to a severe test. Against such a formidable team as our opponents have proved themselves to be this season, we did well, and had a good attempt at goal by O'Brien been improved upon, it would have left us winners.

Although the glory of Blackheath has waned considerably of late, they are still among the front rank of London clubs, and the victory of the Guy's and St. Thomas's team was hailed with delight, having turned the tide upon a series of reverses. St. Thomas's are not the team they were of a few years ago, and did not press the claims of their men to places in the team. Our outsides were left intact, and consequently there was considerably more combination in this game than is usual. The game was unfortunately marred by a few regrettable incidents, which should be absent in such a match, and only serve to cause ill-feeling.

The Association team has not yet turned the corner. They were defeated by Beckenham when only playing with ten men. One man failed to turn up, and the Committee, we are pleased to see, has dealt with such an offence in the only way that is open to it, namely by dropping the offender. Against the Old Carthusians we only had a weak team and they a strong one, but the margin against us was of sufficient size to shew that we are not well represented at present in this branch of the game.

We are extremely pleased to see that of seven dental surgeons who are about to sail for service with the troops in South Africa, no less than five are Guy's men, viz., Messrs. Bell, Chambers, Green, Mills, and Wyand.

There are many changes among the nursing staff, the chief of which is the promotion of the late Sister Job, Miss Holman, to be Assistant Matron, and to her we offer our sincerest congratulations.

Some Points in the Diagnosis and Treatment of Malaria and Tropical Abscess of the Liver.

A paper read before the Physical Society by Mr. P. T. Manson, M.B.

Mr. Chairman and Gentlemen,—I appreciate the compliment you have paid me by asking me to read a paper before this society; at the same time I must apologise for the numerous faults this paper contains, my excuse being that I only knew five days ago that I was down for a paper to-night, and five days is a limited time in which to string together a considerable number of facts.

I intend to discuss Malaria and Tropical Abscess of the Liver, and to bring to your notice one or two important practical points in the diagnosis and treatment of these diseases. During the last three months at the Branch Seamen's Hospital, Albert Docks, and at the London School of Tropical Medicine with which it is associated, I have had the opportunity of seeing a good many instances of these diseases. What I have learnt at these institutions I hope to put before you in as simple a way as possible.

Malaria.

Diagnosis.—There are three methods of diagnosis—

I. The clinical method.
II. The therapeutic method.
III. The microscopical method.

And it is only by a judicious combination of these methods that one can successfully diagnose and treat malaria.

I. *The clinical method.*—Every typical malaria consists of a series of malarial paroxysms which recur at definite intervals of twenty-four, forty-eight or seventy-two hours, and between these paroxysms there is a period of apyrexia and comparative calm. If the paroxysms occur every twenty-four hours we are dealing with a quotidian malaria; every forty-eight hours with a tertian malaria; every seventy-two hours with a quartan malaria.

A brief description of a typical malarial paroxysm is as follows. It consists of three stages—

I. The stage of rigor, or cold stage.
II. The hot stage.
III. The sweating stage followed by relief.

I. *The stage of rigor, or cold stage.*—In this stage, the patient shivers, the teeth chatter; the bed may shake with the violence of the rigor; he feels cold, and endeavours to get warm by huddling himself up under the bed clothes. This stage usually lasts about an hour, during which the temperature rapidly mounts to 103°, 104°, 105°, 106°.

II. *The hot stage.*—These subjective feelings of cold then give way to sensations of heat. Headache, flushed face, anorexia, desire to throw off the bedclothes, aching bones, an intense feeling of discomfort, perhaps delirium, is the picture presented. The hot stage lasts some three or four hours, and gives way to

III. *The sweating stage.*—At last the patient begins to sweat profusely. The marked uncomfortable symptoms of the hot stage begin to disappear coincident with the onset of sweating. During the hot stage the thermometer registered 103°, 104°, 105°, 106°; but with sweating it rapidly falls, and in from two to four hours the patient begins to feel once more that he is more or less of a normal individual. He is languid, but in the vast majority of cases is able to get up and proceed with his work.

During the attack the spleen enlarges, and after, it diminishes, but it is questionable if it regains its normal size for some long time.

Next day, or the day following, or two days later, he again goes through a malarial paroxysm, unless the disease is arrested.

This regular recurrence of paroxysms, a periodicity, as it is called, is the feature of malarial attacks.

A tertian or a quartan periodicity is pathognomonic of malaria. If you have a patient who has pyrexial attacks of the same nature as the paroxysm I have described, on Monday, Wednesday and Friday, you are sure he is suffering from tertian malaria; or if he have similar attacks on Monday, Thursday and Sunday, you are sure he is suffering from quartan malaria. There are no other diseases in which a regular tertian or quartan periodicity is observed.

But what I would warn you against is the diagnosis of malaria by quotidian periodical rise of temperature. Nearly all diseases, we know, exhibit a quotidian periodical rise in temperature, *e.g.*, phthisis, septic fevers, enterica, and a hundred other diseases. Countless mistakes have been made by diagnosing malaria in a patient who gives a history of residence abroad, is anæmic, has an enlarged spleen, and suffers from quotidian pyrexial attacks. To enforce this, I will relate two striking cases in which malaria was wrongly diagnosed because the patients in each instance had lived abroad, were anæmic, had enlarged spleens, and suffered from quotidian pyrexial attacks.

A gentleman who had for years resided in India, came home and fell ill. He had a pyrexial attack every evening, rigors occasionally occurred, the spleen was enlarged, and he was anæmic. Being a doctor he dosed himself with heroic doses of quinine, thinking that he was suffering from malaria. But he got no better in spite of the large doses of quinine he was taking. The blood contained no malarial parasites. Searching for an explanation of the quotidian pyrexial attacks, it was found that for years the patient had suffered from uretheral stricture and that he was leading a catheter life. On examining the perineum, the case was cleared up by discovering an extravasation of urine. And this patient, gentlemen, was a doctor.

Another instructive case illustrating the common error of diagnosing malaria merely because the patient has lived abroad, has a large spleen, is anæmic, and suffers from quotidian pyrexial attacks, is as follows:—The patient with this history had been ill some weeks with

these signs and symptoms. The usual diagnosis of malaria had been made, but the patient failed to improve with vigorous quinine treatment. The blood contained no malarial parasites. On careful examination, the patient gave a history of dysentery some months previous. The liver was slightly enlarged and perhaps somewhat painful on pressure. Liver abscess was suspected and exploration advised. The patient scoffed at the idea, saying that he *knew* he had malaria; however, he consented to exploration if after a week's further treatment with doubled doses of quinine he got no better. He took doubled doses of quinine for a week, and got no better; the liver was accordingly explored, an abscess found, opened, and drained, and the patient recovered.

In both these cases the enlarged spleen was of long standing and due to malarial attacks years previous.

I could give you other instances of wrong diagnosis of malaria in patients who are anæmic, have large spleens, suffer from quotidian pyrexial attacks, and who have lived abroad.

I would sum up by giving you Punch's advice; if you are tempted to diagnose malaria from a quotidian periodicity in a patient who has been abroad; don't.

But as a contrast to the distrust you should have in quotidian periodicity as a sign of malaria, should be the trust you have in diagnosing malaria by tertian or quartan periodicity. Tertian and quartan periodicity occur in malaria and in malaria alone.

II. *The therapeutic method of diagnosis.*—Quinine is the specific for malaria. If, therefore, you have a patient in whom you suspect malaria, and you treat him with quinine in the right amount and form, with the result that he gets better, your suspicions are confirmed.

III. *The microscopical methods of diagnosis.*—The first and second methods of diagnosis if uncombined with the microscopical methods are at least clumsy, uncertain, and unscientific. If by examination of the blood you find malarial parasites present, then the diagnosis is certain, the microscope tells the exact truth if you know how to interpret what you see.

I shall now show you how to examine the blood for malaria by means of fresh films. Clean the finger with spirit, prick it with a clean needle, wipe away the first drop of blood, and when a second droplet appears remove it on the centre of an absolutely clean coverslip held face downwards by a clean dry forceps. Drop the charged coverslip face downwards on to an absolutely clean slide and ring the coverslip with vaseline. Examine with a $\frac{1}{12}$th oil immersion, using a mechanical stage, scrutinize the interior of every corpuscle you see, and spend at least fifteen minutes before you say parasites are absent. If the blood film is so thick that you cannot see individual corpuscles, take another film.

By the microscope, it has been found there are at least three varieties of parasites giving rise to at least three distinct varieties of fever. These are—

I. The benign quartan parasite giving rise to benign quartan malaria.

II. The benign tertian parasite giving rise to benign tertian malaria.

III. The malignant tertian parasite giving rise to malignant tertian malaria.

All these parasites live in the red corpuscle till they sporulate. When they sporulate paroxysm occurs.

The benign quartan parasite lives in about equal quantities in the peripheral and visceral blood. It takes seventy-two hours to mature. It commences as a feebly amœboid piece of protoplasm living in the red corpuscle. Amœboid movement soon ceases and large coarse granules of pigment appear as the parasite grows in size. A vesicular nucleus is seen. When seventy-two hours old it forms spores. The spores are eight to ten in number and are arranged in a symmetrical "daisy form" around a central mass of black pigment. Each spore is pear-shaped and has a bright nucleolus. With spore formation the malarial paroxysm occurs. In quartan fever sporulation takes place as frequently in the peripheral as in the visceral circulation.

With sporulation the spores are set free and each spore proceeds to attack a red cell, which it enters, and goes through the phases I have mentioned sporulating when seventy-two hours old and producing another malarial paroxysm. Some spores, however, proceed to develop in a different manner for the purpose of developing in the secondary host of the malarial parasite, the mosquito. But I have too little time to go into the fate of these.

Now, if you have a patient infected with a single generation of quartan parasites malarial paroxyms will occur on, say, Monday, Thursday and Sunday, and this will be a simple benign quartan fever.

If in addition to this infection he harbours a second generation, the members of which sporulate on Tuesday, Friday and Monday, he will have paroxysms on Monday, Tuesday, Thursday, Friday and Saturday. This will be a double benign quartan fever. If in addition to these two infections he harbours a third generation, the members of which sporulate on Wednesday, Saturday and Tuesday, he will have malarial paroxysms on every day of the week. This is a triple quartan infection.

The benign tertian parasite lives in smaller quantities in the peripheral than in the visceral blood. It takes forty-eight hours to mature. Starting as an active piece of amæboid protoplasm, it loses its activity, developing pigment granules, which are excessively active, dancing about in the protoplasm of the parasite. It has a vesicular nucleus. When forty-eight hours old it is larger than the normal red corpuscle, and what is of great importance in its recognition, has expanded and decolourised its containing red corpuscle. It then sporulates, giving rise to the paroxysm of benign tertian malaria. Sporulation occurs more commonly in the vesical than in the peripheral circulation, consequently it is fairly uncommon to find sporulating forms in finger-blood. The spores are some fifteen to twenty-six in number, and are arranged more or less like a rosette. With sporulation the spores are set free, attack a red corpuscle which they enter and develop in, sporulating

in forty-eight hours, and causing another malarial paroxysm. Some spores, however, develop somewhat differently for the purpose of propagation of the spores in the mosquito; their fate, however, I cannot go into.

Supposing a patient has a simple benign tertian infection, and sporulation occurs, and therefore the malarial paroxysms occur on, say, Monday, Wednesday, Friday, and Sunday, this is a simple benign tertian malaria.

If, in addition to this infection he harbours parasites of another infection, the members of which sporulate on Tuesday, Thursday, Saturday and Monday, he will have paroxysms on every day of the week. This is a double benign tertian malaria.

The malignant tertian parasite lives in much larger numbers in the visceral than in the peripheral blood, and the total number of parasites in the circulation is very much larger than in the benign affections I have described.

There are two kinds of parasites demonstrable in the finger blood. They are:—

1. The fever forms.
2. The crescent forms.

1. *The fever forms* begin as very actively amœboid pieces of protoplasm, lying at first on, and then in the red corpuscle. There may be two in one red corpuscle. As they age, activity ceases, and they settle down as minute colourless rings, which are never larger than half the red corpuscle. Pigment is formed—it is very finely granular. The corpuscle in which it lives is apt to become smaller than a normal red corpuscle, is apt to assume a brassy colour, and may become distorted and cremated. This change in the red corpuscle is pathognomic of malignant malaria, but is not always constant. Sporulation occurs when the parasite is forty-eight hours old. It takes place in the deeper viscera, *e.g.*, the brain, the spleen, the bone-marrow, and consequently is seldom or never seen in finger-blood. When sporulation occurs, the paroxysm of malignant malaria takes place. This paroxysm differs rather from the typical malarial paroxysm I described at the beginning of this paper, in that the rigor is less marked, the pyrexial stage is longer and may be accompanied by severe vomiting, diarrhœa, boneache, headache, anorexia and mental depression, and at any moment a pernicious access, into which I will go more fully, may occur.

2. *The crescent body* is derived from these fever forms but does not cause fever, does not sporulate, and does not appear for some six to eight days after the fever forms have disappeared. It is the crescent body which propagates malignant malaria in the mosquito. It sometimes exists in very large quantities. The other day in a case of malignant malaria I estimated there were about 10,000 per c. m.m.

I shall show you crescents under the microscope; once seen you will never forget their striking appearance.

Having found a parasite or parasites in your examination of the blood, ask yourselves questions such as these.

1. How large is it as compared with the red corpuscle?
2. Does it contain pigment, and if so is the pigment coarse or fine, stationary or active?
3. Is it amœboid, and if so slightly or greatly amœboid?
4. Is the corpuscles it lies in larger or smaller, darker or lighter than a normal red corpuscle?
5. Is it sporulating, and if so, how many spores are there and how are they arranged?
6. Is it of the same age as other parasites on the slide?
7. Does it belong to the same variety as other parasites?
8. Are there crescents present, or are the crescent derived flagellated organisms present.

With a little experience these points can be decided with comparative ease and you can say whether you are dealing with—

I. A simple, a double, or a triple benign quartan fever.
II. A simple, or a double benign quartan fever.
III. A malignant fever.
IV. Or with a combination of these three types.

Another diagnostic feature in the blood examination, and one which I have found constant in all malarial and post-malarial conditions is a relative increase in the large mononuclear leucocytes. This leucocyte forms about 10 per cent. of the leucocytes of normal blood, according to the books, but I think this ought to be just a little higher, say 15 per cent.; now in all malarial and post-malarial conditions it exists up to over 20 per cent., usually 30 per cent. In my own case, ten days after an attack of malaria I found my large mononuclear leucocytes formed 38·5 per cent. of the total leucocytes. In my experience this increase in the large mononuclear leucocyte is constant in all malarias I have met. It persists for at least three months after a malarial attack and is of value in deciding—

1. Whether a patient has malaria, or
2. Whether he has had malaria during the previous three months.

This subject requires further investigation.

With regard to malignant malaria I wish to say a few words. The term is bad, for a patient who harbours parasites of malignant malaria may have a fever which may be milder than even the mildest benign quartan or tertian (though usually it is more severe); nevertheless though he is comparatively slightly ill, he at any time is liable to a sudden outburst or explosion of his disease. These sudden outbursts or pernicious accesses, as they are termed, if not vigorously and promptly treated with quinine are liable to be fatal—hence the use of the term "malignant."

The pathology of these pernicious accesses is as follows:—For some unknown cause an excessive accumulation of the malignant parasites occurs in an important viscera; there they sporulate, and absolutely plug the capillaries of that important viscus, leading to anæmia of the part, with alarming or fatal consequences.

Thus, if the brain be the important viscus in which this congregation has taken place, we may get—

1. Hyperpyrexia.
2. Coma.

3. Mania.
4. Paralysis, paresis, aphasia, apoplexy, fits.
5. Blindness.

According to the centre which has been rendered anæmic by the plugging of its capillaries by myriads of parasites. I hope to show you the brain of a child who died of comatose malaria. Under the low power you will see the capillaries absolutely plugged with lumps of pigment, and when you remember that each lump of pigment is surrounded by some dozen or more spores, you will clearly understand how anæmia of important vital centres may be produced, leading to the alarming or fatal results of a pernicious access.

Again, these pernicious accesses may fall on *e.g.*,—

The stomach, producing gastric attacks.

The intestine, producing diarrhœic, choleraic or dysenteric symptoms.

The heart, producing syncope.

The pathology is the same, viz., the plugging of capillaries of these important viscera by parasites.

To a patient in whom a pernicious access occurs, quinine is as essential as is operation to a patient who has a strangulated hernia. In its use you must be prompt and vigorous, or your patient may die.

Remember that these pernicious accesses come on with extraordinary suddenness in the course of a malignant malaria, and therefore regard a patient who has crescents in his blood as a man in whom alarming and fatal symptoms may suddenly supervene; and if possible keep him in bed and under strict observation till the parasites disappear.

The treatment of malaria.—Summed up by the word quinine. But how shall it be given. It may be given

1. By mouth.
2. By rectum.
3. By intramuscular injection.
4. By intravenous injection.

If possible always use the hydrochlorate, or acid hydrochlorate of quinine.

1. *By mouth.*—In a mild case of benign tertian, benign quartan, or mild malignant fever, wait till after the sweating stage and then give ten grains, preferably in solution. Follow this treatment by five grains t.d.s. for a week, and then by five grains t.d.s. every Sunday for the next three months. With a benign tertian or quartan you will probably arrest the fever after the first day or two, but possibly after some six, seven, eight, nine, or more months a recurrence may take place as the result of a lowering of the general vitality by cold, excesses in food and drink, mental worry, or some other illness. Malignant malaria is not checked so readily, but once you have overcome it there is less liability to recurrence months later than there is with benign tertian or benign quartan malaria. With a malignant case remember the possibility of the pernicious accesses I have described, so keep the patient in bed till his crescents have disappeared and he begins to make blood. With your benign tertians and quartans you need not be so cautious.

In giving quinine by mouth, avoid pills and tabloids, they are often passed unchanged. Be more particular about this in bad cases.

2. *By rectum.*— For children and those in whom quinine causes vomiting, rectal injections of quinine are of great value. See that the injection is retained.

3. *By intramuscular injection.*—I can speak with the greatest confidence of the efficacy of this method, especially in cases of malignant malaria which must be rapidly and thoroughly brought under the influence of quinine. Now it is a well-known fact, that though morphia and strychnine may be injected hypodermically in the tropics with only good results, quinine injections are frequently followed by tetanic. The result is that cautious practitioners refuse to inject quinine and therefore lose patients. There is no chance of tetanus if you are thoroughly aseptic. I shall show you how to give an aseptic intramuscular injection of quinine. Requirements are:—

1. A test tube sterilised by boiling, and lying in 1–20 carbolic.
2. A hypodermic syringe, sterilized by boiling and lying in 1–20 carbolic.
3. A minim glass sterilized by boiling, and lying in 1–20 carbolic.
4. Quinine hydrochlorate in tabloid or powder form.
5. A test tube holder.
6. A spirit lamp.
7. Boiled water.

Render the hands surgically clean, and insert the amount of quinine you require into the test tube, say 10 grains. Add some 10 minims of boiled water, and boil the mixture well over the flame; allow it to cool slightly and pour your solution into the sterile minim glass, from which it is sucked up by the sterile hypodermic syringe. The skin over the gluteal region has been scrubbed with 1–20 carbolic. Plunged the needle at right angles to the surface deep into the gluteus maximus an inject slowly. Cover with a sealed dressing. With these precautions tetanus will not occur.

4. *By intravenous injection.*—This is highly spoken of by some authorities. A solution as follows

℞	Quininæ Hydrochlor ...	1 gramme.
	Sodii Chloridi.	75 centrigrammes.
	Aquam. destillatam ad ...	10 grammes.

is employed.

Of other drugs I shall only recommend Euclumin. It is tasteless and has a direct toxic action on malarial parasites, and is therefore of great value for children who hate quinine.

Treat symptoms such as headache, hyperpyrexia, etc., as they arise by appropriate remedies, but avoid large doses of antipyrin.

I will only mention other drugs employed in malaria. They are of little value as compared with quinine. They are—Methylene Blue, Capsicum, Carbolic Acid, Iodine, Anarcatur, and a host of others, but by giving these you are playing at treatment; quinine, and quinine alone being the specific for malaria. A patient who cannot

take quinine must not go to a malarial country or his life will be a burden to him. For post-malarial cachexia and anæmia, advise Pil. Blaud with Arsenico bis die, generous diet, and change.

I will now give you abstracts of two cases of malaria I have recently seen at the Branch Seamen's Hospital, both of which present interesting features.

A Case of Malignant Malaria.

W. L., æt. 20, a cook on the sailing ship "Charlotte," a native of Germany, last voyage from Savannah was admitted to hospital on August 17th, 1901, for cachexia and debility. He had never had malaria till the week previous, when his ship being some twenty-five days out ran into bad weather in the Channel. He and some of his shipmates became prostrated with fever. I examined the bloods of five of these sailors, and found crescents in three of them, including the patient, whose blood contained the most crescents, and who was evidently the sickest man of the five. He was anæmic and cachetic, the spleen was enlarged and tender, and there was no pyrexia.

Diagnosis.—Malignant malaria.

Treatment.—Bed, generous diet, quinine and arsenic by mouth. Two days after admission the temperature rose to 99·4°, and on August 21st to 101·4°.

On August 22nd I found the fever forms of the malignant tertian parasite as well as crescents.

23rd, 24th, 25th.—There were evening pyrexial attacks, the temperature running up to 102°, 103°, 104°, with morning remissions to subnormal, these remissions being preceded by sweating. There were no rigors.

It was obvious that the patient was not properly under the influence of quinine, so intramuscular injection was decided upon, quinine being given as well by the mouth in 5 gr. doses t.d.s.

26th.—Quininæ Hydrochlor. gr. ix. was injected into gluteus max.

27th.—Quininæ Hydrochlor. gr. ix. was injected into gluteus max.

28th.—Quininæ Hydrochlor. gr. ix. was injected into gluteus max.

29th.—Quininæ Hydrochlor. gr. ix. was injected into gluteus max.

After two injections there was no more pyrexia; the fever forms of the parasite disappeared in two days and the crescents were gone in three to four days.

The patient went out on September 2nd, feeling well, though weak, with instructions to feed well, to take five grains of quinine t.d.s. for a week, five grains t.d.s. on Sundays, t.d.s. for the next three months, and Bland's pill with arsenic till the anæmia and cachexia had gone.

The interesting feature of this case is that it proves the immensely greater value of giving quinine intramuscularly over giving quinine by the mouth, in a really serious case of malaria. The other case is—

A Case of Benign Tertian Malaria and Falariasis.

T. D., æt. 22, a fireman on the steamship "North Point," a native of Calcutta, last voyage from Philadelphia, was admitted on August 7th, 1901, for pyrexia and a history of fever extending over some five or six years, but aggravated during the last month. He described his illness as consisting of a series of fever attacks occurring on alternate days, and gave a description of each attack which tallied with the classical description of a malarial paroxysm. Each attack commenced with a rigor, went on to a hot stage, and cleared up after two or three hours' sweating, the attack lasting about eight to twelve hours. Between attacks he was fit for work.

On admission, he was evidently in the hot stage of a malarial paroxysm. The temperature was 104·4°; there was anorexia, and patient complained of pain all over: the spleen was slightly enlarged and tender. Sweating soon set in, the temperature fell to subnormal, and next day there was no pyrexia, the blood, however, containing a large number of maturing benign tertian parasites as well as a fair number of filariæ sanguinis hominis nocturna.

Diagnosis.—Benign tertian malaria plus filariasis. An attack of malaria was predicted for the next day, and as the patient was not seriously ill it was decided to withhold quinine to see if our prognostications were fulfilled. They were fulfilled, for on the following day a typical malarial paroxysm occurred, with typical rigor, typical hot stage, and typical sweating stage, followed by fall of temperature and relief of symptoms. Some mosquitos had been sent me from Cambridge. These I determined to feed on this patient with a view to tracing the parasite in them, however, next day on examining the blood I was astonished to find no parasites. The patient, who was a half-caste and looked a deceitful fellow, was suspected of having taken quinine on the sly; we searched his locker, and found that he had smuggled a bottle of quinine pills into hospital, with these he had evidently treated himself and inhibited furthur fever. He was then put on quinine grs. v. t.d.s., and discharged on August 12th with instructions to take quinine for the next three weeks.

The interesting features of this case are:—

1. The association of benign tertian malaria with filariasis.
2. The ready reaction of the fever to quinine.
3. The absence of symptoms due to filariasis.
4. The proof that the microscope tells the truth if you know how to interpret correctly what it shows you.

Tropical Liver Abscess.

I shall now very briefly treat of liver abscess, its diagnosis and treatment.

The diagnosis of liver abscess may be very easy or very difficult. To take a case in which it easily diagnosed.

The patient gives a history of dysentery some weeks or months previous. From this he recovered but after some weeks began to feel seedy, lost his appetite, lost weight, had a little rise of temperature of nights. Then he began to feel pain in the liver and perhaps in the right shoulder. Night sweats became a constant feature and there was a regular quotidian pyrexia at night of two, three or four degrees, with morning remissions.

On examination you remark the patient looks very ill, is wasted, and has a peculiar muddy complexioned skin.

No malarial parasites are present in the blood. The liver is unequally enlarged, there may be bulging, fluctuation may be obtained and you may find a tender spot in the liver. There may be signs of involvement of the lower lobe of the right lung. Local bulging and local œdema point strongly to subsequent pus.

A difficult case is such a one as this:—The history of dysentery is not clear, there is little or no enlargement of or pain in the liver, and there are no localising signs of pus. The temperature may be sometimes raised at night, sometimes remain normal. Night sweats may or may not be present and there are little or no signs of involvement of the lower lobe of the right lung. You can find no malarial parasites in the blood, quinine does no good, and in spite of treatment the patient gets worse, loses flesh, becomes muddy complexioned, and you feel sure, that if you cannot find out what is wrong with him, he will surely die.

Dr. Manson gives the following golden rules in tropical practice:—Think of hepatic abscess in all cases of progressive deterioration of health; and suspect liver abscess in all obscure abdominal cases with evening rise of temperature, especially if there is a history of dysentery with an enlarged and painful liver.

Always examine the blood of such patients for malarial parasites.

If in doubt, give an anæsthetic and explore the liver, using an exploring syringe with a needle at least three and a half inches long. At least six punctures must be made before you give up your search for pus.

If there are localising signs of pus, explore where they advise; if there are not localising signs, start in the eighth or ninth interspace in the axillary line, as most abscesses lie in the right lobe above and behind, so direct your needle upwards and backwards. If unsuccessful, proceed to explore the rest of the liver dulness in at least five or six places.

You will know when your needle is in the liver by the barrel of the syringe moving up and down with respiration. If you do not find pus easily, remember you may have gone right through an abscess into healthy liver beyond, so on withdrawing your needle see that you have a good vacuum in the syringe barrel, so that with slow withdrawal, suppose your needle point re-enters the abscess, pus will well up into the vacuum you have established.

Remember that liver pus is not like the ordinary forms of pus. It is of a chocolate-brown colour. I have some here in this bottle.

Having found pus, withdraw the syringe, and over the site of the puncture make an incision large enough to admit of this large trocar and cannula. Push the trocar and cannula into the abscess and withdraw the trocar; let some pus escape and then slip this long stretched drainage tube, which has lateral openings cut in it and is stretched out on this long probe right down to the bottom of the abscess. Then withdraw the cannula over the stretched drainage tube. Relieve the stretching force by forcing the point of the probe through the rubber, and allow the tube to slowly contract on the probe till it reaches its normal size. Cut off the excess of tubing, stitch the tube in, and dress. The after-treatment consists in frequent dressings at first; but the drainage tube must not be disturbed for a week if it is fulfilling its duty. You may then take the tube out from time to time, cleanse it and return it again; but do not on any account shorten the tube till it becomes pushed out by the healing bottom of the abscess.

Later, wash out the sinus with a solution of Tincture Iodi ʒii. to the pint of boiled water. This operation is Manson's method of treating liver abscess. Its results are most gratifying, far more so than are the results obtained by extensive laparotomies which many surgeons recommend for liver abscess. If any of you are interested in seeing cases of tropical disease, I hope you will visit the Branch Seamen's Hospital, where I shall be delighted to show you cases.

Sport.

Rugby Football.

GUY'S & ST. THOMAS'S v. BLACKHEATH.

Played at the Rectory Field on November 30th, before about 1,500 spectators. Blackheath won the toss, and Bingham kicked-off for the Hospitals. Receiving the return, Morgan kicked well into their twenty-five, and in quick succession the ball was twice carried over the Blackheath line, a try being just averted in both cases. With the aid of a free kick, Blackheath succeeded in carrying play to Hospital territory, and from another "free," Banning made an attempt at our goal without success, McEvedy returning well into touch. From another free kick, against Blackheath, O'Brien landed the ball well within the Heathen's twenty-five, and Morgan shortly after was pushed into touch when looking dangerous. Coopper then made two brilliant runs through our midst to our twenty-five, and Blackheath pressed hard, but Allcock and then Harrison saved finely. Blackheath were not to be denied, for Coopper received from Cattell, ran through our men, handled Morgan brilliantly, and raced round behind the posts, the try being converted. The Hospitals now played up and carried the ball over the enemy's line, a touch-down being given. McEvedy and Allcock then put in good work, the latter nearly scoring, and the next moment Morgan received from O'Brien and scored a good try far out; the try was not converted, and half-time was called with score 1 goal to 1 try in Blackheath's favour.

On resuming, an intercepted pass nearly let in Blackheath, but Morgan soon after put in a fifty yards run, and Allcock succeeded in dribbling past their back, but was knocked over in doing so, Blackheath touching-down. From a scrum Payne received and kicked across cleverly, Allcock picked up well, handed off two opponents, dodged

their back and ran in behind the posts; O'Brien converting. Play was now very fast, and the ball travelled to the Blackheath line and back again in a very short time. Here Wall saved well, and Morgan kicked nearly to half-way from a mark made on our line. The play returned to our goal-line, but Hudson saved in the nick of time, Wallace transferring play to half-way with an individual effort. Morgan then kicked across, our forwards nearly securing another try, and play now settled in the Heathen's twenty-five, barring an occasional break away, and the ball crossed their line more than once, though no score resulted. Time being eventually called, leaving the combined team winners by 1 goal, 1 try to 1 goal. Team :—

Hospitals.—E. M. Harrison (back); E. Morgan, A. B. O'Brien, P. F. McEvedy, F. Allcock (three-quarter backs); M. C. Wetherell, O. V. Payne (half-backs); H. A. Cutler, D. H. Trail, A. H. E. Wall, A. R. Thompson, R. C. Lawry, A. C. Hudson, J. Wallace, R. G. Bingham (forwards).

Remarks.—Where all played well it is hard to pick out anyone for special praise, only in the first ten minutes were any faults perceptible, when there was some weak passing and running across the field, and the tackling was not all that could be desired. The three Thomas's men were invaluable, making the pack, when it had once settled down, quite equal if not superior to their heavy opponents. The outsides played finely and showed resource, while of the forwards Cutler tackled well, Trail saved many times, and Wall assumed the aggressive on one occasion. The Blackheath forwards played a hard game, and to the casual observer, one of their number seemed to display marked signs of peevishness as the game advanced.

GUY'S v. OLD MERCHANT TAYLORS.

Played at Richmond. Guy's won the toss. Old Merchant Taylors kicked off, ball well returned and play settled down on half-way line; a free kick was awarded to Old Merchant Taylors for off-side play and touch was found. From the throw out the ball reached the Old Merchant Taylors' back division, and as a result of some good passing a try was scored but was not converted. Guy's kicked off and loose play resulted until the Old Merchant Taylors' forwards made a dangerous rush into Guy's territory which resulted in Guy's having to touch down. At this period of the game the Guy's tackling with one or two exceptions was extremely feeble, the Old Merchant Taylors breaking through again. Louisson was now conspicuous for a short dribble which gained a lot of ground for us, but the ball was gradually worked back to our 25. A penalty kick was awarded to Old Merchant Taylors right in front of our goal, but the kick failed; immediately after this O'Brien dropped a splendid goal from the half-way line. After the kick-off the ball was gradually worked towards the Old Merchant Taylors' goal, and from a pass out Allcock obtained the ball, and running very strongly got through the Old Merchant Taylors' backs, but unfortunately was pushed into touch on the line.

Half-time was called. After half-time the tackling improved somewhat, Wetherell especially tackling well and saving many a dangerous-looking rush; the ball came out well from a scrum and eventually reached Morgan, who got well away, but was pulled up by the full back just on the goal line. Almost immediately after Wetherell obtained possession and dodging well passed to Allcock, who made one of his characteristic runs and scored; the try was not improved upon. The Old Merchant Taylors scored another try which was converted, the game ended up, Old Merchant Taylors 1 goal 1 try—8 points. Guy's, 1 dropped goal 1 try—7 points.

Remarks.—The game was undoubtedly lost by the bad tackling of the Hospital. With one or two exceptions, notably Cutler, Lawry, and Wetherell, the tackling was extremely weak. If our men would only go low and really "down" their men we should do far better, the prevailing idea seems to be to hold your man up when tackled, but this does not pay in an ordinary club match, much less in a cup tie.

GUY'S 2nd XV. v. OLD MERCHANT TAYLORS "A."

Played at Honor Oak Park, on Saturday, November 23rd, and resulted in a win for our opponents by 2 goals 2 tries to 2 tries.

Burney failed to put in an appearance, and for some time we played one man short. During this period our opponents scored twice, one of the tries resulting from a misunderstanding with the linesman.

In the second half we got going in much better style, and scored twice. Our opponents did not score in this half. Time was called when we were attacking strongly.

The forwards played uncommonly well. Wall and Trubshaw were especially noticeable. Team :—

Guy's.—R. W. Bridger (back); J. T. Hicks, F. Walker, C. D. Pye-Smith, E. N. Jupp (three-quarter-backs); F. Cutler, A. E. Kynaston (half-backs); A. H. E. Wall, K. V. Trubshaw, F. Featherstone, R. M. Rendall, M. A. Collins, T. B. Layton (forwards).

Association Football.

GUY'S 2nd XI. v. OLD CRANLEIGHANS.

This match was played at Catford Bridge on November 9th. Guy's turned up one short, and a substitute, with a very small knowledge of the game, played at outside left.

The first half was very even, Guy's perhaps having more opportunities of scoring, but the shooting was very weak, and at the interval nothing had been scored.

As soon as the game was re-started, Guy's ran down and Chignell scored a goal. For some time we pressed, but the shooting was still very poor, and we did not score again. Five minutes from time German received an injury to his foot, and twice in quick succession the Old Boys' right wing got down and scored. Both points

were open to a suspicion of off-side, to say the least of it. The result was that we were beaten by 2 goals to 1. Team:—

GUY'S.—E. A. Collins (goal); H. B. German, A. R. Wilson (backs); R. C. Martin, J. Goss (half-backs); E. Plummer, E. Wragg, T. F. Wilson, T. A. Chignell and F. Morres (forwards).

GUY'S 1ST XI. v. HASTINGS.

This match, played at Hastings on Wednesday, Nov. 20th, resulted in a win for the hospital by 5 goals to 4. Hastings were the first to score with a good shot from their centre, and almost immediately afterwards added a second. This put Guy's on their mettle, and after some pretty combination among the forwards Barber scored with a grand shot. Before half-time Litchfield scored twice for the hospital and we crossed over leading by 3–2.

In the second half the forwards were again seen to great advantage, and Barber scored twice. Hastings then added two more goals, and we were left winners as stated. The forwards played very well throughout the game, and special mention should be made of Denning at right-half. Team:—

GUY'S.—E. A. Collins (goal); A. R. Wilson and A. Leeming (backs); B. N. Plummer, J. Gore, and A. Denning (half-backs); W. A. Wragg, P. C. Litchfield, H. Barber, E. L. Norton, and P. A. Peall (forwards).

GUY'S 2ND XI. v. LORN ATHLETIC.

(SURREY JUNIOR CUP—THIRD ROUND).

The 2nd XI. met with a ruthless defeat by 9 goals to nil at the hands of Lorn, on Saturday, November 23rd, at Denmark Hill. The figures, although so disparaging, by no means represented the play.

For the opening twenty minutes of the first half Guy's had much the better of the game, and certainly had very bad luck in not scoring, it was then that the Lorn forwards worked the ball down the field and scored. Before the end of the first half three more goals were added by our opponents.

During the second half five more goals were scored against us, and although our men pressed during the last quarter of an hour, we were unable to score. Team:—

GUY'S.—S. H. Peatfield (goal); A. Leeming, J. Hogarth (backs); C. Martin, P. Pedrick, S. L. Frankenburg (halves); G. B. Harland, S. H. Barlow, B. H. Stewart, R. Messent, P. A. Peall (forwards).

REMARKS.—This is the first defeat the team has sustained this season, and Lorn were certainly lucky in winning as they did. Peatfield in goal was very weak, and let us down badly. At left back Hogarth was unable to cope with our opponents' right wing when they once passed the halves. The three halves played the best game we have seen them play this season, and it was certainly not their fault that the team was beaten. The passing amongst the forwards was better, but many opportunities of scoring were missed by weak shooting. All the members of the team must, however, remember that there is still another cup to be competed for, and that that cup has not graced our smoking-room for the last three years.

GUY'S 1ST XI. v. BECKENHAM.

This match was played at Beckenham on Saturday, November 30th, and resulted in a win for the home team by 2 goals to 1. Guy's were handicapped throughout the game by having to play with only ten men, German failing to put in an appearance.

In the first half Guy's played against the wind and immediately began to press, and Norton had hard luck in not scoring from a grand centre by Wragg. The Beckenham left wing then ran down and scored with a shot that ought to have been stopped.

Half-time arrived with the score 1—nil in favour of Beckenham. The latter part of the game was played in semi-darkness. Beckenham put on another goal and Barber scored for Guy's. The forwards played well together and had hard luck in not scoring again. The halves should learn to be more accurate with their passes. Team:—

GUY'S.—E. A. Collins (goal); E. N. Plummer and A. R. Wilson (backs); A. Denning, J. Goss, P. A. Peall (halves); W. A. Wragg, P. C. Litchfield, H. Barber, E. L. Norton (forwards).

GUY'S 2ND XI. v. SEVENOAKS SCHOOL.

This match was played at Sevenoaks on November 27th. We had the assistance of Norton and Denning from the first, but five of the regular team were not playing. In the first half Peall scored twice for us; Sevenoaks scored three times. Norton and Stewart each scored in the second half, and as Sevenoaks failed to score, we won by 4 goals to 3. The game was fast and exciting from beginning to end. We would have scored more, but for the excellent game played by the opposing goal-keeper.

REMARKS.—Wyatt was good in goal and will be a useful acquisition to the team. Both backs played well, Crofts was the better. The half-backs were our strong point, all playing particularly good games. Norton and Peall were the best of the forwards; Messent played well, but should remember that a good centre is better than a bad shot. Team:—

GUY'S.—H. D. Wyatt (goal); A. D. Crofts, S. M. Wells (backs); A. F. Denning, A. L. Forster, H. L. Frankenburg (half-backs); G. Harland, P. A. Peall, B. H. Stewart, E. L. Norton, H. Messent (forwards).

GUY'S 2ND XI. v. ST. MARY'S 2ND XI.

This match was scratched by our opponents.

Death.

THOMAS.—On December 2nd, at Shirley, Southampton, Daniel William Thomas, L.R.C.P. London, M.R.C.S., aged 30 years.

ED.—D. G. G.

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Notice.

All Communications, Articles, Letters, Notices, and Books for Review should be forwarded, accompanied by the name of the sender, to the Editor, GUY'S HOSPITAL GAZETTE, *Guy's Hospital, S.E.*

Any of our Subscribers who may be desirous of having their numbers of the GAZETTE *bound should leave them with the Librarian.*

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The charge for binding in blue, with the Arms of the Hospital in gold will be ONE SHILLING AND SIXPENCE.

Calendar of Coming Events.

December, 1901.

Sat. 21.—Messrs. Lucas and Lane's take-in; Drs., K. Anderson and C. H. Robertson; Cl., A. Wylie.
G.H.A.F.C., II., Croydon Park 2nd XI., home.
Wed. 25.—Christmas Day. Concerts in the Wards.
Thur. 26.—Boxing Day. Medical School Office closed.
Concert in Ruth and Barnabas Wards, 4 p.m.
Messrs. Golding-Bird and Dunn's take-in; Drs., J. B. Copland and W. F. Box; Cl., H. K. Lacey.
Fri. 27.—Concert in Charity Ward, 4 p.m.
" Dorcas Ward, 4 p.m.
" Medical Wards, 5 p.m.
Sat. 28.— " Lazarus Ward, 5 p.m.
" Cornelius Ward, 6 p.m.
" Naaman Ward, 6 p.m.
Mon. 29.— " Lydia Ward, 5 p.m.
" Luke Ward, 6 p.m.
" Patience and Samaritan Wards, 6 p.m.
Tues. 30.— " Job Ward, 5 p.m.
" Astley Cooper Ward, 7 p.m.

January, 1902.

Thur. 2.—Lectures resumed after Christmas recess.
Sat. 4.—1 p.m., Clinical lecture by Dr. Perry.
G.H.R.F.C., I., Old Leysians, home.
III., Blackheath School, away.
G.H.A.F.C., I., Old Eastbournians, home.
II., Woodford Albion, away.

Guy's Hospital Gazette.

DECEMBER 21, 1901.

Christmas Old and New.

" Oscilla ex alta suspendunt mollia pinu."

" Now Christmas is come,
Let us beat up the drum,
And call all our neighbours together;
And when they appear,
Let us make them such cheer,
As will keep out the wind and the weather."

So sang Master Simon before that genial company of "married dames, superannuated spinsters, blooming cousins and half-fledged striplings," gathered together to celebrate Christmas at Bracebridge Hall, that home of old-fashioned hospitality; the honoured yule log kindled " with the last year's brand " blazing merrily away in the wide-mouthed grate, cast a warm ruddy glow over the group of beaming faces.

In those "good old times, grand old times, great old times," when that elegant highwayman, Claude Duval, "Du Vall, the ladies' joy; Du Vall, the ladies' grief," was the terror of the Bath road, and a coach that could perform (if God permit) the muddy, jolting journey from Belle Sauvage on Ludgate Hill, to the " White Lion " at Bath in three days, earned the name of "flying machine." Christmas meant more to the people than it does to us in these degenerate days of tubes, motor cars, and dinners served in jerks whilst rushing across the country in an express at sixty miles an hour; then it was to many the one opportunity in the year for the family reunion. And with what hearty profuse hospitality they celebrated the event! What dinners they gave! The table loaded with good cheer, groaned under the weight of " bright iris-tinted rounds of beef," great gelatinous pies, colossal hams, and steaming plum-puddings. Nor was the "jug of wine" forgotten, the Wassail bowl filled with spiced wines went brimming round the board to the cheery chorus,

"Lordlings, Christmas loves good drinking,
Wines of Gascoigne, France, Anjou;
English ale that drives out thinking,
Prince of liquors, old and new.
Every neighbour shares the bowl,
Drinks of the spicy liquor deep."

and then, dinner over, the tables being cleared, with what headlong gusto they entered into the merry games and revels—burning their fingers

"Snatching at a feast of plums,
Snip! Snap! Dragon!"

Or dancing "Sir Roger de Coverley" to the spirited fiddling of the village orchestra.

Max Beerbohm, that amazing author of "More" and other "Works," writing in a "serio-comic" strain, would persuade us that though Dickens by his "Christmas books" revived the old customs of the season, when "puddings were stirred, carols sung, and kisses given under mistletoe," he could not renew their significance. "The old sentiments were dead; and though you are still trying desperately to galvanize them, dead they will remain." In this dyspeptic view we should be very sorry to share.

That modern Scrooge—the cultured cynic—who, in carefully turned epigrams assures us the festival is a fraud, that brings nothing but "bile, bills and boredom," might well be taught *his* Christmas lesson by being shown how the season is kept at Guy's, and then sent home to read his Dickens again. For though the march of time, with its modern improvements, has done much to temper the robust joviality of olden times, and though as a people we are less typically John Bullish, having become refined and polished, living in an age of kid gloves and cigarettes, when there is "more of dissipation and less of enjoyment." Yet, in spite of all this smoothing process, the spirit of Christmas, far from being played out or dead, retains all its old fascinating power. The heart of the season, with its geniality and benevolence, is too human to suffer from the wheel of change which has played such havoc with mere customs and manners, and in no place is this better seen than in a hospital, which might well have taken for its Christmas motto the poet's couplet:—

"At Christmas be merry, and thankful withal,
And feast thy poor neighbours, the great with the small."

J. A. H.

Small-pox.

CLINICAL LECTURE BY DR. WASHBOURN.

November 16th, 1901.

Gentlemen,—I thought this would be an appropriate occasion for bringing before you the question of the Clinical Course and Diagnosis of Small-pox. Mr. Gibson has been good enough to give me short notes of a few cases that have recently come up to the surgery suffering from this disease which I will begin by reading to you.

The first case was a boy, 14 years of age, who came up to the front surgery on the evening of the 25th October. His temperature was 102·5°, pulse 110. He complained of headache and weakness of the legs. He gave a history of constipation and feeling ill for two days. There was no vomiting, no back pains, no erythema, and no papules, the body and limbs being carefully searched. He had some tenderness beneath the left costal margin and doubtful enlargement of the spleen. The tongue was furred, and the edges and tip were red. A definite diagnosis was not made. On the 26th the patient came up again with a temperature of 101·2°, pulse 110. He could not stand owing to weakness in his knees. He was suffering from marked headache, had no pains in his body, but was very drowsy and listless. There were some acneiform papules about his face, arms, back of wrists, dorsa of feet, front of legs and thighs, which felt shotty. One on his chest, and another on the right upper arm, were becoming vesicular. Also there were a few spots on the buccal mucous membrane and on the palate. This case was notified as variola and the diagnosis was subsequently confirmed.

The next case was a woman, 18 years of age, who had been vaccinated in infancy, but had not been re-vaccinated. She was seen on the night of the 26th of October. Her temperature was 102·6°, pulse 106. There was a history of constipation for fourteen days, and headache for the past three days. The tongue was furred, there was no exanthema, or prodromal erythema; there were no rigors, no pain in the back, and no vomiting. Neither enlargement of the spleen nor abdominal distension was noticeable. The patient was given some castor oil and told

to come up the next day. She arrived on the evening of the 27th when her face was flushed, headache was present, she had vomited once during the day, she complained of pains about the shoulders, and the tongue was furred. She was very listless and drowsy. There were small papules, about six on the left side of face, a few on the forearm just below the elbows and round the knees where the garters had pressed, one papule on the line of waistband pressure, but none on the thighs, hands, or feet. Variola was diagnosed and was subsequently confirmed.

The next case was a girl, 14 years af age, who had never been vaccinated. She was seen on the evening of the 28th of October and complained of headache and pains all over. Her temperature was 103·2°, pulse 120. Her eyes were closed by seropurulent secretion due to catarrhal conjunctivitis, which was said to be of old standing. The patient was in a drowsy condition, objecting to being disturbed for examination, but taking no notice of conversation. There was a three days' history of feeling ill; she had vomited several times, and complained of feeling cold, and of pains in limbs and about the shoulders. The tongue and breath were very foul, the lips dry and cracked. There were no physical signs in the chest, and no exanthema. Variola was suspected and notified, and has since been confirmed.

In small-pox, as in other fevers, there is a definite *incubation period*. When a patient has been exposed to infection, certain changes, of which we know nothing, take place before symptoms develop. This period constitutes the incubation period, which is almost invariably twelve days.

The actual *onset* of the attack varies in character, as you will see from the above notes. In some cases there is a sudden onset, generally with a rigor in an adult, or with a convulsion in a child. In other cases, as in these that I have read to you, the onset is somewhat indefinite; but whatever may be the nature of the onset, there follows an *initial* or *prodromal* stage, which lasts about forty-eight hours. During the initial stage, the temperature is raised to 101°, 102°, 103°, or even 104°, and the patient feels very ill, listless, and drowsy. A very common symptom is pain in the back, so severe as to be mistaken for lumbago. Another symptom is vomiting; sometimes the patient has sore throat, which is the chief complaint; in some cases delirium is a prominent symptom; but the main symptoms that are suspicious o variola during this stage are, pain in the back, vomiting, and rigors.

During the initial stage there may be diverse eruptions, *initial rashes*, as they are called, which may be scarlatiniform or macular. These rashes are of very great importance from the point of view of diagnosis, inasmuch as you may mistake a scarlatiniform initial rash for scarlet fever, or a macular rash for measles. The scarlatiniform rash may be specially limited to a triangle, in which the base is just on a level with the crest of the ileum, the apex at the pubes, and extending down the upper parts of the thighs. It is called the bathing-drawers rash. When you see a rash with that distribution in a patient who has pyrexia and is ill, you may be fairly certain that he is suffering from small-pox. These eruptions are sometimes especially marked on the extensor surfaces of the limbs, and particularly along the line of the extensor longus pollicis. It may be impossible to distinguish these rashes from those of measles or scarlet fever; but as a rule, there is some difference to guide you. The scarlatiniform rash is often petechial, especially when it affects the triangular area. You must remember this, because in seeing the small petechiæ of the early eruption, you might suppose that you were dealing with a case of hæmorrhagic small-pox.

The initial stage lasts about forty-eight hours, and on the third day from the commencement of the symptoms the true *eruption* occurs. With the appearance of the eruption, as you will notice from these charts, the temperature goes down. Sometimes it goes down absolutely to normal, and with the fall of temperature the patient feels very much better, the pains disappear, the vomiting stops, and the patient says he is practically well.

With a mild initial stage the subsequent attack is almost always a mild one. A severe initial stage is, as a rule, followed by a severe subsequent attack, but it may be followed by a

mild attack. This is not only important from the point of view of prognosis, but, as I shall show you later, it is important in regard to the question of the pathology of variola.

The typical *eruption* of small-pox starts, as a rule, upon the face, the scalp, and the wrists. It then appears on the trunk and the rest of the upper limbs, and last of all it comes out upon the lower limbs. That is of importance with regard to the diagnosis. As a rule, the eruption affects the distal parts of the extremities—the wrists, and ankles, and lower part of the legs—more than it affects the upper arms and thighs; the palms and soles are frequently affected. The eruption takes about three days to come out. It begins with raised papules which are very hard, and are what is called "shotty" to the touch. By the second day the papules becomes vesicles; the vesicles increase and ultimately become pustules, the clear fluid in the vesicle becoming turbid and yellow. That occurs about the sixth or seventh day of the eruption. The pustules, soon after being formed, are surrounded by a red areola. After a short time the pustule either bursts and a crust forms, or it begins to dry up, and in four or five days later, that is to say, about the twelfth or thirteenth day of the eruption, it forms a scab. The pustules and vesicles have this peculiarity, that if you prick them only a portion of the fluid exudes. That is simply due to the fact that the pustules and vesicles are divided up into loculi by septa. This is of some importance in distinguishing variola from varicella. Another point is that pustules very frequently become umbilicated, the roof of the pustule sinks in, and a little depression is formed. After the scab has separated, a scar is left, which is first of a reddish colour, then it gets brown and pigmented, and ultimately becomes white. If you are not familiar with the appearance of these scars you may easily be misled. Everyone is familiar with the white scars which are found in patients who have had small-pox some time previously, but you must remember that this is a later stage following upon the red and pigmented stages. With the development of the eruption there is very often a good deal of swelling of the skin of the face, hands, feet and genitals. This is of good augury, because in severe cases where there is no swelling, a fatal termination generally occurs; the swelling simply means that the tissues are reacting to the irritant. The eruption not only attacks the skin, but also the mucous membrane, and if you look into the mouth you will find papules upon the buccal mucous membrane and upon the soft palate. Not infrequently the eruption goes right down to the larynx. The papules on the mucous membrane do not run the same course as those on the skin, they are at first red, raised spots, but they rapidly become white or yellow. Not infrequently when the pustules are beginning to form, a little hæmorrhage occurs into them. Such a hæmorrhage is not of any importance, it is of no more importance than the petechiæ, which I have described to you as occurring frequently in the early triangular rash.

Now let us consider what happens to the patient whilst the eruption is coming out. You will remember that the eruption comes out on the third day. About the fifth day of the attack it is vesicular, on the ninth day it is pustular, and on the fifteenth day it begins to scab. This chart will show you what happens in the ordinary course of discrete small-pox. The temperature comes down with the appearance of the eruption sometimes absolutely to normal, sometimes not quite to normal, the symptoms subside, and the patient appears to be convalescent. But about the tenth day when the papule is becoming a pustule the temperature goes up again, the patient again feels ill, the pyrexia continues, and only comes down again to normal as the process of scabbing occurs. So that during the development of the eruption, the patient is feeling well, and then gradually the temperature goes up, as the papule comes to maturity. It is about the twelfth or thirteenth day that the patient is most severely ill, and then is the time at which death generally occurs. If the patient gets over that period, he generally recovers. That is the course of discrete small-pox. There are two febrile periods, the fever of the initial stage,

and the fever of suppuration as it is called, these two periods being separated by an intermission.

In *confluent* small-pox the intermission is not so marked, and there is often only a remission in the temperature and symptoms. The pocks run together and cause a great deal of inflammation of the skin. There is considerable swelling on the face and hands and very often the genitals, but in some very severe cases there is no swelling because there is no proper reaction. There is a considerable amount of eruption in the mouth, the breath is very fetid, and frequently a broncho-pneumonia follows, due to secretion from the mouth being aspirated. The larynx is often involved, and there may be actual necrosis of the cartilages. The tongue is frequently swollen, so swollen as to interfere with the breathing. As the temperature rises after the first fall, the patient becomes very severely ill, very delirious, and the pulse gets very rapid. With confluent small-pox the mortality is very high, from sixty to seventy per cent., the patients dying about the thirteenth day.

There are various gradations between confluent pox and discrete small-pox. There is also the *abortive* form, in which there is an initial stage, with or without an initial eruption. The temperature goes down about the third day, and nothing further happens, the true eruption does not come out, and the patient gets well, only having suffered from the initial stage. I remember seeing a very marked case in a student who visited a small-pox hospital. Just twelve days afterwards he had severe pains in the back, and a scarlatiniform eruption. On the third day, when we expected that the eruption of small-pox was coming out, his temperature came down, and he got perfectly well. That was an instance of the initial stage without further development.

Another type is that in which there is an initial stage followed by the appearance of papules which become vesicles, but do not develop into pustules. In this *modified* form the eruption quickly disappears, there is no secondary fever at all, and the eruption quickly passes to the scabbing stage. These modified forms of small-pox may be due to three causes. They may be due to the patient having been protected by a previous attack, to the patient having been protected by vaccination, but also they may occur when the patient has not been protected artificially at all, but has an increased amount of natural immunity. You must not forget that these modified attacks do not occur only in patients who have been vaccinated.

There is another type of variola, the *hæmorrhagic* form. These hæmorrhagic cases begin almost always with a severe initial stage. Very often they have initial rashes, and the hæmorrhage may appear during the initial stage, and the patient die before the true eruption comes out. Hæmorrhages appear in the skin exactly like those of ordinary purpura. In many cases not only is there hæmorrhage into the skin, but also into the mucous membranes of the mouth, bladder, rectum, or stomach. If there is hæmorrhage from the mucous membrane of the mouth, decomposition takes place in the blood adhering to the teeth and gums, producing a very offensive odour. The patient suffers from severe collapse, and almost invariably dies. You see, therefore, how important it is to correctly diagnose hæmorrhagic small-pox. You must not mistake the initial eruption with slight petechiæ for it, nor the hæmorrhages which occur into the pock at a later stage.

Now for a moment, think of what is the cause of small-pox. The first thing to remember is this: There are two distinct fevers, the one being the early initial fever which occurs quite independently of the true eruption of small-pox, because in the abortive cases you may get the initial stage without any eruption at all. The initial fever may be so severe when accompanied by hæmorrhages, that the patient dies before the eruption comes out. The second fever is that which occurs as the eruption comes to maturity. If the case is going to prove fatal, it is generally during the height of the second fever that the patient dies. This must suggest to you that in variola there are two poisons, one which comes to maturity quite early, the chief effect of which has gone off by the fourth day, and the other which comes to maturity about the eleventh or twelfth day. I believe I

shall give you evidence to show that the virus of small-pox is a dual one. There are two distinct viruses acting at the same time, but bringing out their effects at different periods of the disease. We will call these viruses A and B. A, being the virus which causes the initial stage, and B, the virus which causes the papular eruption and secondary fever.

The virus A, may exist without the virus B, in the cases where there is an initial stage without any subsequent eruption.

I would draw your attention to the inoculation of patients with small-pox. In former days people were inoculated with small-pox in order to protect them against the disease contracted in a natural way. This was what was called variolation. Before vaccination was in vogue, people used to be inoculated in order to be protected against the natural disease, because they found that when they were inoculated artificially, the disease, as a rule, ran a milder course than if contracted in the natural way. The inoculation was carried out in this way. A little of the contents of a pock was either put under the skin, or placed on a plug of cotton wool and put in the nostrils. At the point of inoculation a nodule appeared in the skin, and this formed a pustule in two or three days. About the ninth or tenth day after inoculation the small-pox eruption came out, and the patient suffered from constitutional symptoms. The incubation period was a little shorter than when the disease was taken in a natural way, and the eruption came out about the usual time, *i.e.*, about the end of the third day. Such a variola was infective in the same way as the natural disease, and on account of its infectivity and the way it caused the disease to spread it was ultimately prohibited by law.

The next thing that I want to draw your attention to, is vaccination. In the first place, you must thoroughly understand what vaccine is. The original virus that was used, was a lymph obtained from a natural disease which occurred amongst cattle. This disease was called cow-pox, a disease consisting of vesicles upon the udders, and which at one time was fairly prevalent. At the present time cow-pox is an exceedingly rare disease, and hardly ever met with. Another source of vaccine, is cow-pox lymph, which has been passed through calves or through the human subject. Vaccine has also been obtained by inoculating calves with the virus of small-pox. As a rule, there is great difficulty in getting vaccine as the result of the inoculation of calves with small-pox. In some cases the calf, when it has been inoculated with small-pox virus, has developed a local papule, and children inoculated from that papule have contracted small-pox. In a certain number of cases, by passing the virus from one calf to another calf, lymph has been obtained, which, after inoculation, has produced typical vaccination in children. So that it is possible, although difficult, to obtain true vaccine by inoculating a calf with the lymph from a case of small-pox. Now, if you vaccinate a person, no effects are observed for the first two or three days. About the third day a red spot appears, on the fifth day this is converted into a vesicle, and about the tenth day the vesicle becomes a pustule. It is very much the same as what takes place in the papule of small-pox.

Consider next what is the nature of vaccine. The fact that it can be derived by passage through calves from variola, shows that it must be a modified small-pox virus. But in what way is it modified? Many people will tell you that it is simply an attenuated virus, that is to say, the virus of small-pox which has been rendered mild. If this were the case, you would expect that, if you inoculated a very susceptible person with vaccine, he would develop small-pox; but that never occurs. On very rare occasions, you do get very severe disease caused by vaccination. Vaccine itself may be so virulent that it produces a generalised eruption of vesicles and pustules all over the body. This may be so severe as even to be fatal. So that here is a case where the vaccine is exceedingly virulent—by no means attenuated—and yet it does not produce small-pox. It cannot be, then, that the vaccine is simply an attenuated virus of small-pox. You will remember what I told you about the dual virus of small-pox. A is the poison which produces the initial stage of small-pox, and B is the poison which produces the

papular eruption and secondary fever. It is possible that vaccine is one of these viruses. By passing small-pox through a calf, the virus A is destroyed, and the virus B remains as vaccine.

This is on a par with the fact that the principal thing that vaccination does is to modify the eruptive stage. If a patient has been vaccinated and contracts small-pox, the eruption is modified, that is because the eruption is due to the same poison as the vaccine which immunises the patient.

Anyhow, whatever truth there may be in this theory, I think what I have said will serve to fix upon your mind, the clinical course which small-pox takes.

The Christmas Story.

Once upon a time, when Christmas literature was redolent of the atmosphere of "peace, goodwill unto men," and not, as now, with "battle, murder and sudden death," we used to read how families would assemble together at Christmas-time from all quarters of the globe to revel on united happiness, turkey, roast beef and plum-pudding; how hard-hearted, old curmudgeons underwent an annual softening of the heart on Christmas Eve, and began to bestow turkeys, geese and cheques upon their starving employés with open hands. If they neglected to do so, grim ghosts (so we were told) would appear to them, holding ghostly money-bags in ghostly hands, and standing by the bedside as they cowered beneath the clothes, would tell them awful tales and serve as awful object-lessons, so that the fate of those miserly, hard-hearted men was dark and eerie and altogether un-Christmaslike and dreadful. And in those days there was never a Christmas annual which did not give us a rendering (with variations) of two typical Christmas stories, the one a tale of humble, the other a tale of high life, which ran something like this:—

The humble story.

It is Christmas Eve.

Scene: A poorly-furnished room.

Dramatis Personæ: An old couple, gazing thoughtfully at the fire.

"Martha!" The old man breaks the silence, speaking in tremulous tones and stirring the fire with an absent air. "Martha, it's nigh upon ten years now since our boy ran away to sea, and somehow it's borne in on me that he's been thinking of us and we shall see him again to-night."

The old woman nods her head in assent, having strangely enough been visited with the same presentiment. Then she totters off and returns after an interval with a pair of the runaway's slippers (apparently overlooked in his hurry to depart). These she carefully puts on the fender to warm.

Meanwhile, the old man makes up the fire, tidies the grate, and lighting a candle balances it with great care on the top of the family bible on the little table in the window, to serve to the wanderer as a beacon-light of home.

At this juncture, an original thought strikes the old woman.

"John," she says, "We must set the door ajar. It 'll never do for the door to be shut, or maybe the lad 'll think he's not welcome home."

So they set the door ajar (in this story there are no draughts); and draw up the chair on which, ten long years ago, their boy was wont to sit. Then they wait, and sure enough in a little while a step is heard approaching, the door flies widely open, a burly form fills the doorway, a bearded man rushes in, and soon the wanderer —after many embraces—settles down in his warm slippers on the dear old chair, and all is happiness. (The returning prodigal is always "burly" and "bearded." It is a remarkable fact that he has never outgrown the chair of his boyhood and his slippers never seem too small.)

The story of High Life.

Again, it is Christmas Eve. The cold is intense. Snow is falling thick and fast, and snowdrifts render the roads around ——— Hall impassable to all save the foolhardy and venturesome. (That the snow is really very thick is evidenced by the fact that in this story not even the Christmas carol singers have ventured abroad.) The Squire of ——— sits before his glowing logs and thinks deeply. No sound breaks the stillness, save the wail of the wind as it howls round the gables of the old house.

"It is now five years," he murmurs to himself, "since she left me. That villain has had time to tire of her by now."

He moves restlessly in his chair for a few moments, then rises, and taking a candle (always in a massive silver candlestick) from the sideboard (always old oak), he mounts the stairs, enters the picture-gallery, and pauses before one of the pictures hanging there. (This picture invariably has its face turned to the wall.) Five years before, one Christmas Eve, his only daughter had fled from home with her music master. (He is always a music master and generally an Italian exiled for political reasons.) She had been missed, and after searching for her high and low, they had brought him a letter found on her toilet table addressed to him. (The letter is always attached to the pincushion—the means vary.)

He had read it in silence. Then he had ordered the whispering servants to shut up her room and never mention her name to him more, and going to the gallery he had turned the face of her picture to the wall. Now, for the first time since that night, he gazes once again upon her pictured face; then slowly, as though led on by some power he cannot resist, he makes his way to her room, unlocks the door, and steps within, holding the candle high above his head. The room is

just as she left it on that fatal night. (The dust and dirt of five years' accumulation is a trifle not worth mentioning!) Her guitar lies on the floor (she always used to play the guitar). The blue ribbons attached to it are trailing on the ground at his feet. He remembers how, when last he saw that guitar, those blue ribbons were on her white neck. (It is to be observed that the ribbons are always blue and her neck always white.) He stoops slowly, and lifting the guitar from the floor, places it tenderly on a vacant chair, then turns away and goes downstairs. The fire is burning cheerily as he crosses the hall to the door, opens it and looks out into the night. Snow everywhere, thick, white and closely falling. The Squire shivers, and sinking into a chair by the hall fire, falls into a reverie. Half-asleep, half-awake, he lives again in visions many episodes of his past life and, through them all flits the bright figure of his daughter. Hours pass thus, and, at last, the thinker stirs uneasily in his chair. A feeble wail rises upon the air, repeated again and again with an insistency that makes his flesh creep. Fearing, he knows not what, he hastens to the door. Outside, in the snow, lies the figure of a woman with a babe clasped tightly in her arms. Lifting her up with difficulty he staggers with his burden into the hall. The firelight plays upon her face as he lays her down. Though pallid and worn, he recognises her. It is his long-lost daughter come home to die. (She always returns home in a snowstorm and has never yet been known to come back unaccompanied by the baby.) It need hardly be said that the infant becomes the darling of the old house and the light of its grandfather's eyes. It should be noted that the long-lost daughter only recovers if her husband has been considerate enough to leave her a widow. If she be likely to recover, the village choir, having managed somehow to surmount the hitherto impassable snowdrifts, besiege the house at this juncture with cries of "Hark the herald angels sing."

Here's a hint to all whom editors defraud of well-earned glory,
A road to fame and money before head and heart wax hoary;
No need for plot or character—a situation gory
In an atmosphere of coffins, and behold! a Christmas story.

Prodigals are out of fashion, those home-coming girls and boys,
Who turned up on Christmas Eve for all the world like clockwork toys;
Convicts win the race for favour, now our gloomy mental poise,
Courts thin yellow-faced detectives for its literary joys.

Take a lonely-looking house in a lonely-looking square,
A mysterious-looking stranger with a foreign-looking air;
Add a weird, wild scream of murder, the creaking of a stair,
Shake ingredients well together, you've got a Christmas story there
Epidemics or mosquitoes, villains, lunatic or sane.
There's a plenty. Only, look you, let no living soul remain,
Crying Finis; or for certain all your toil will be in vain,
And the post bring disappointment and your story back again.

N. B. B.

The Last But One of the Dandies.

A DRAMATIC ORGIE,

BY

THE BIRD OF PREY AND THE BALLAD-MONGER.

CAST.

Count D'Orstep	— — —
Lord Rareold Fourale *(his chief creditor)*	A. H. S.
Lord Waistcoat *(his enemy)*	— — — —
Mons. Cliquot *(his coiffeur)*	X. R.
Lord Lyons, Lord Handcock, Sir Edward Bulwer-Lytton *(his companions)*	Mr. Hancock. Mr. Lyons. F. E. Fr-m-ntl-
Mr. Tom Raikes *(a pal at Peel's)* ...	C. H———
Captain Easer *(a naval officer)* ...	P. H———
Quartermaster	H. Wacher.
Ferdinand, Octavio *(valets to Count D'Orstep)*	Charlie. The Commish.
Winkles *(his page boy)*	Master Forsyth.
President of French Surgeons ...	H. S. French.
Lady Somewherehere	Miss Jennie Brydone.
AND	
Lady Blessmisole	Sister ———

ACT I.

(Scene. Count D'Orstep's *apartments (furnished) in the Hotel Perry. There is a general air of sterilised luxury. On walls a few risqué prints. Curtain rises on* Octavio, *practising palming half-crowns while munching bread and cheese; enter* Ferdinand, *reading small green book.*)

Oct. Mornin doc, watcher got there?

Ferd. 'Tis but a trifle of mine own, a pocket Grey.

(Door opens suddenly; enter D'Orstep *in a sterilised overall, his hair in Spencer Wells.)*

D'Orstep *(seeing valets).* Ah, F. and O., how well you're looking! *(Seeing himself in mirror)* How well I'm looking!

(Enter Cliquot; *X rays on him; chorus off, "There's air."*

Clic. Ah! bon jour, milor, avez vous bien dormi?

(They continue to converse in French concerning the pens, ink and paper of the gardener's aunt while Cliquot *does* D'Orstep's *hair.)*

Oct. Shall I read to you, my lud?

D'Orstep. Any news?

Oct. *(reading with obvious difficulty).* "Amongst the élite in the park yesterday mornin' was Count D'Orstep on his famous bicycle horse. Just as he reached the fountain a wheel came off and the Count was thrown heavily to the ground, fracturing his leg badly. With great presence of mind he seized some material from an

entanglement near, and wired the limb. At the conclusion, his page boy distributed handbills among the expectant crowd."

D'ORSTEP. How these newspaper people get hold of things! *(Enter* Lytton.) Ah, Lytton, how well you're looking!

LYTTON. Good morning, D'Orstep, have you seen my book, "The Last Days of Pretorii, or the Adventures of an Etonian in Khaki"? There's a portrait of me on every page.

D'ORSTEP. Does anyone read books nowadays? Ah, Lytton, how dreadfully tired you must get of writing, but then, you can't help it, can you?

(*Enter* Waistcoat *on tiptoe, chasing his own centre of gravity.*)

D'ORSTEP *(grinning with fright)*. How...well...you're ...looking!

WAISTCOAT *(gazing reprovingly at* D'Orstep's *costume, and shaking his forefinger)*. One of my old dresses.

(*Enter* Lady Blessmisole. *She is attired in a manner faintly suggesting "The Belle of New York." She trips over* Octavio's *feet and falls into a steriliser, and is promptly politzerised by* Ferdinand.)

WAISTCOAT. Manlike, but unmanly!

D'ORSTEP. Ah, dear lady, how well you're looking!

(Lady Blessmisole *does not reply, but proceeds to turn the pictures face to wall. She then advances and smiles.* Lytton *dies.*)

D'ORSTEP (*Sings softly to himself.*)

My name is — —, I'm a surg-e-on great,
And this is my famous frockcoating of state,
And these are my dear little sharp little knives,
My dear little sharp little knives.

CHORUS.

All's well, all's well, with the Great — —,
So wish him the longest of lives;
With his one little, two little, three little, four little,
Five little, six little knives, etc.

[Sings as an encore, "Just a little bit of string."]

(*To* Lady B.). Shall we wander?

LADY B. (*in a high falsetto*). Let us go to Exeter Hall. It will give us strength for the WORK. AH! DEAR FRIENDS ———

(*General panic.* D'ORSTEP *puts his foot through mirror.* Ferdinand *goes into screaming convulsions, and* Octavio *attempts to palm himself off.* CURTAIN.)

ACT II.

(Scene. *Peel's billiard saloon.* D'Orstep *discovered playing* 50 *up with marker for a tanner a side. Friends of* D'Orstep *looking on.*)

D'ORSTEP (*plays for cannon, but pots white by mistake.*) It's so simple, isn't it? (*Turns to* Fourale.) Call me Willie; it will give me courage.

WAISTCOAT. Beastly fluke. If that had happened at Oxford you would have been sent down.

D'ORSTEP (*about to play, when* Waistcoat *jogs the end of his cue, causing him to cut the cloth badly.*) These free incisions are so much better, aren't they? (*Turns round and sees* Waistcoat.) Ah, Waistcoat, how well you're looking! (*Bashes him over the head with cue.*)

(*A scene of indescribable confusion follows. The table is wrecked. The air is thick with billiard balls, one of which catches* Tom Raikes *on the frontispiece.*)

RAIKES (*screaming*). Who the——why the——what the——?

(*Under cover of the confusion,* D'Orstep, *picking up the best hat that he can find, leaves without paying.* CURTAIN.)

ACT III.

(Scene. *A backwater on the Thames, near London Bridge. Enter "Lazy Gal," a penny steamboat. On the bridge,* Capt. Easer, *with a pair of Fergusson's telescopes under his arm. On board,* D'Orstep, *attired in dirty flannels and a yachting cap,* Lady Blessmisole and party. *There is a strong odour of bottled beer.*)

CAPTAIN. Quartermaster, how's her head?

QUARTER. R.O.P., sir.

CAPTAIN. Ma gracious, Wacher, we must turn her. (*Proceeds to turn ship. Finding the manipulation difficult,*) What water have we?

QUARTER. Dunno, sir.

CAPTAIN. Ma gracious, we must pass a sound. (*Retires for refreshment*).

D'ORSTEP (*proceeding to fish with a bit of thread and a bent pin*). So simple, isn't it? What they want with all these elaborate flies I can't think, can you?

LADY B. (*swallowing her emotion with difficulty*). Oh, D'Orstep, DO put me on shore. (*Rushes to side of vessel and gazes longingly at the sea.*)

D'ORSTEP (*patting her on the back*). Ah, dear lady, how well you're looking!

(Waistcoat *appears at bilge hole, and catching* D'Orstep's *line, proceeds to tie ham bone to it.*)

D'ORSTEP. I've got a bite, haven't I? (*Pulls up bone.*) How interesting, isn't it? We will send it to the front and call it a ham bone, and then, perhaps, they will take it in. (*Suddenly the ship strikes.*)

QUARTER. (*excitedly*). She's perforated, sir.

CAPTAIN. Ma gracious, why don't you plug her?

(*Ship begins to settle down. Captain rapidly blows out a number of patent little bags on which passengers float to shore in safety.* CURTAIN.)

ACT IV.

(Scene. *An operating theatre in Paris. A number of French surgeons, in full evening dress, discovered operating. In various parts of the theatre harmless duels in progress. Most of the onlookers are armed.*)

(*Enter* D'Orstep *disguised as a surgeon.*)

D'ORSTEP (*bowing*). How well you're looking.

(*Patient immediately stops breathing. Uproar. Anæsthetist fights his way to patient, and succeeds in restoring respiration.*)

PRESIDENT OF OPERATORS (*weeping profusely*). My brave! (*Feels in pocket and produces Legion of Honour, which he pins on anæsthetist. Feels in other pocket, produces another and pins it on to patient. Tremendous*

enthusiasm. Cries of "Vive la everything" from spectators. Addressing D'Orstep) What pattern of knife for the amputation is it that you make to use?

D'Orstep (*horrified*). (P. 140. R. 52) Knife! Knife! Does anyone use a knife? I always use scissors. It's so much simpler, isn't it?

(President, *finding difficulty with scalpel, picks up axe and hacks wildly at limb.*)

D'Orstep (*pulseless*). My method; they have stolen my method! (*Dies. Then, suddenly remembering himself,* "Any news?" *and dies again.*)

(President *proceeds to pin Legions of Honour all over him while the curtain slowly descends.*)

Appointments.

MEDICAL SCHOOL APPOINTMENTS.

The following appointments have been made by the Medical Council and approved by the House Committee:—

Clinical Assistants.—Messrs. J. Atkins, P. N. B. Odgers, H. C. Keates, S. Hodgson, W. M. Robson, A. R. Thompson.

Clinical Assistants in Medical Out-Patients.—Messrs. W. W. C. Jones (Dr. Shaw); R. T. Collins (Dr. Washbourn); J. W. Gromitt (Dr. Bryant).

Obstetric Dresser.—Mr. G. W. Smith (January 1st).

Dressers in the Throat Department.—Messrs. F. D. S. Jackson, H. W. Brown, M. W. Cohen, H. A. Cutler, H. T. Palmer, H. P. Wiltshire.

Clerk in the Throat Department.—Mr A. H. Turner.

Assistant Surgeons' Dressers.—Messrs. R. Moyle, R. Willan, H. W. Bethell, R. G. Seagrove (Mr. Symonds); C. H. Dawe, H. D. Smart, M. J. Mottram, H. H. Jenkins (Mr. Lane); C. H. Reinhold, R. Larkin, H. Watts, F. H. Wallace, E. L. Ward (Mr. Dunn); J. Bromley, D. H. Richards, G. C. F. Robinson, G. Nunn (Mr. Fripp).

Medical Ward Clerks.—Messrs. P. R. Bolus, F. P. Hughes, C. E. Iredell, H. C. C. Mann, P. A. Peall, C. D. Pye-Smith, H. O. M. Beadnell, K. Black, G. Carlisle, F. G. Goble, E. H. B. Milsom, B. W. Lacey, J. F. Rey, W. T. P. Meade-King, P. P. Cole, A. M. Webber, F. B. Lowe, R. P. Rowlands, H. H. Carter, A. E. F. Kynaston, M. G. Louisson, G. H. Rees, G. Russell, B. Moiser, B. H. Stewart, H. F. B. Walker, L. H. Frankenberg, R. A. Greeves, E. Lloyd, L. J. J. Orpen, O. V. Payne, G. A. Ticehurst.

Assistant Physicians' Clerks.—Messrs. C. S. Morris, J. W. Dadd (Dr. Shaw); B. I. Rahim (Dr. Washbourn); S. C. Bowle (Dr. Bryant); M. B. Taylor (Dr. Fawcett).

Surgical Ward Clerks.—Messrs. F. Rogerson, R. Franklin, F. Barnes, R. D. Bridger, J. H. Clatworthy, W. S. Orton, R. M. Rendall, O. Black, R. Edridge, C. P. Harvey, A. R. Beaumont, C. J. S. Dismorr, A. V. Maybury, J. E. Spiller, J. D. Thomas, F. Alcock, A. F. Hertz, W. M. Mollison, E. C. Myott, F. W. M. Palmer.

Clerk in the Skin Department.—Mr. Faulks.

Aural Surgeon's Dressers.—Messrs. A. H. E. Wall, J. W. Grommit (January–February).

CIVIL.

Hardenberg, E. J. F., has been appointed Junior Resident Medical Officer to the North-West London Hospital.

Hood, Dr. Donald W. C., has been appointed Examiner in Medicine for the current Third M.B. Examination at the University of Cambridge.

Meachen, G. Norman, M.B., B.S. Lond., M.R.C.P. Edin., has been appointed Honorary Physician to the St. Pancras and Northern Dispensary.

Pakes, Walter C. C., D.P.H. Cantab., F.C.S., has been appointed Analyst and Bacteriologist to the Transvaal Government.

Parry, Leonard A., F.R.C.S. Eng., B.S., M.D. Lond., has been appointed Assistant Surgeon to the Royal Alexandra Hospital for Children, Brighton, *vice* Mr. T. H. Ionides, resigned.

MILITARY.

Lieut.-Colonel E. Bovill, M.D., I.M.S., retires from the service.

Pass List.

Royal College of Surgeons of England, November, 1901.

FINAL FELLOWSHIP EXAMINATION.

H. W. Bruce, A. R. McLachlan, W. R. Nichols, W. B. Secretan, P. Turner, L. Wilkin.

PRIMARY FELLOWSHIP EXAMINATION.

A. R. Thompson.

University of Cambridge, November, 1901.

EXAMINATION FOR THE DEGREE OF DOCTOR IN MEDICINE.

Stanley E. Denyer, C.M.G.

University of London, October, 1901.

M.B. EXAMINATION.

Examination for Honours.

Medicine.—First Class: H. C. Keates. Second Class: Myer Coplans. Third Class: W. H. Bowen.

Obstetric Medicine.—Third Class: J. F. Northcott.

B.S. EXAMINATION.

Second Division.—K. B. Alexander, H. C. Keates, D. W. Smith, K. V. Trubshaw.

PROGRAMME
TO GUY'S HOSPITAL

PROGRAMME

BARNABAS & RUTH. 1 p.m.

SONG - - - - - - - - - - Mr. J. G. GIBSON.
SONG - - - "The Vegetarian" - - - Mr. H. TIPPING.
SONG - "Love's Old Sweet Song" Mr. H. McD. PARROTT.

PHILIP. 1.15 p.m.

SONG - - - - - - - - - - Mr. J. BUTLER.
SONG - - - - - - - - - - Mr. A. C. H. GRAY.
SONG - - - "A Military Man!" - - - Mr. J. ATKINS.

MARY. 1.35 p.m.

SONG - - "Lousiana Lu" - - Mr. S. HODGSON.
DANCE - - - - - - - - - - Mr. D. H. TRAIL
SONG - - "Ma Coal-Black Lady" - Mr. GREENFIELD.
SONG - "The Magpie said, Come in" - Mr. F. G. CROSS.

QUEEN VICTORIA. 2.5 p.m.

SONG - "All on the Road to Brighton" Mr. A. C. RANSFORD.
SONG - - "Kicklebury Brown" - - Mr. PALLANT.
SONG - - "My Gal Susie" - - Mr. H. WACHER.

BRIGHT. 2.20 p.m.

SONG - - - - "Maud" - - - Mr. H. WACHER.
STUMP SPEECH - - - - - - Mr. H. M. M. WOODWARD.
SONG - - - - - - - - - - Mr. J. ATKINS.

STEPHEN. 2.40 p.m.

SONG - - "The Burglar's Serenade" Mr. H. S. FRENCH.
SONG - "When I marry Amelia" - Mr. F. G. CROSS.
SONG - - "The Three Crows" - - - Mr. P. CAMPS.

OUT-PATIENTS.

SELECTION - - - - - - - - - THE BAND.

MIRIAM. 3.30 p.m.

SONG - - - - - - - - - - Mr. A. C. H. GRAY.
SONG - - - "The Longshoreman" Mr. H. McD. PARROTT.

JOHN. 3.40 p.m.

SONG - - - - - - - - - - Mr. H. TIPPING.
SONG - "All on the Road to Brighton" Mr. A. C. RANSFORD.

PATIENCE & SAMARITAN. 4 p.m.

SONG - "The Master of the Ring" Mr. D. G. GREENFIELD.
SONG - - - - - - - - - - Mr. J. ATKINS.
SONG - - - "My Gal Susie" - - - Mr. H. WACHER.

CHARITY. 4.15 p.m.

SONG - - - "Louisana Lu" - - Mr. S. HODGSON.
DANCE - - - - - - - - - - Mr. D. H. TRAIL.
SONG - - - "The Longshoreman" Mr. H. McD. PARROTT.

DORCAS. 4.30 p.m.

SONG - - - "Ma Coal-Black Lady" Mr. D. G. GREENFIELD.
SONG - - - "The Burglar's Serenade" - Mr. S. H. FRENCH.
SONG "What makes you turn your nose up, Sally?" Mr. F. G. CROSS.

LUKE. 4.45 p m.

SONG - - - - - - - - - - Mr. TIPPING.
STUMP SPEECH - - - - - - Mr. H. M. WOODWARD.
SONG - - - "Kicklebury Brown" - - - Mr. PALLANT.

NAAMAN. 5 p m.

SONG - - - "The Motor Car" - - - Mr. CURTIS.
SONG - - - "Kicklebury Brown" - - - Mr. PALLANT.
SONG - - - - - - - - - - Mr. J. ATKINS.

JOB. 5.20 p.m.

SONG - - - - - - - - - - Mr. GIBSON.
SONG - - - "Lousiana Lu" - - Mr. S. HODGSON.
SONG - - - - - - - - - - Mr. H. McD. PARROTT.

LAZARUS. 5 35 p.m.

SONG - - - - - - - - - - Mr. D. G. GREENFIELD.
DANCE - - - - - - - - - - Mr. D. TRAIL.
SONG - - - - - - - - - - Mr. F. G. CROSS.

MARTHA. 5.50 p.m.

SONG - - - - - - - - - - Mr. A. C. RANSFORD.
SONG - - - - - - - - - - Mr. H. WACHER.
SONG - - - - - - - - - - Mr. GRAY.

LYDIA. 6.10 p.m.

SONG - - - - - - - - - - Mr. PALLANT.
SONG - - - - - - - - - - Mr. CURTIS.
SONG - - - - - - - - - - Mr. GREENFIELD.

CORNELIUS. 6.25 p.m.

SONG - - - - - - - - - - Mr. McD PARROTT.
DANCE - - - - - - - - - - Mr, D. TRAIL.
SONG - - - - - - - - - - Mr. J. ATKINS.

ASTLEY COOPER. 6.40 p.m.

SONG - - - - - - - - - - Mr. A. C. H. GRAY.
SONG - - - - - - - - - - Mr. H. WACHER.
STUMP SPEECH - - - - - - Mr. H. M. WOODWARD.
SONG - - "The Magpie said, Come in" - Mr. F. G. CROSS.

GOD SAVE THE KING

Passim.

Christmas is again with us. We feel this in the festive stir and eagerness that the hospital life is already marked by. The routine of ordinary work is giving place to preparations for the mirth and hilarity and good fellowship that the old and yet ever-welcome season brings to us. A spirit of kindly humour is already awakened in anticipation of what is coming and is now so near. Men are arranging concerts and attending rehearsals, and hammering away at decorations and platforms, and putting both willing hearts and skilful hands into their work. It only remains, therefore, for us to express the time-honoured and genial wish—

A Merry Christmas and a Happy New Year

alike to the givers and the receivers of the feast.

With one exception, the round of concerts and other gaieties will follow much the same order as previous years. The innovation, however, is an important one; instead of having separate concerts in the Medical wards, there is to be a united one given in the Out-patient Hall on Friday, December 27th. In many ways this is a great improvement on the older plan, and the only wonder is that it has not been adopted before; not the least of the benefits will be the sparing of patients dangerously ill the distress and irony of hearing gay music and comic songs.

The final arrangements for the tea to be given to the Borough children in the Out-patient department are nearly complete, and there is every prospect of the occasion being a great success—the actual entertainment is to take the form of two cinematographic displays, one for the boys and the other for the girls. The appeal for clothes and money has been liberally responded to, and now it only remains for men to come forward and help in giving the usually cheerless Out-patient halls a cheery Christmas-tide appearance.

On Boxing-night and the following evening, the Court Room, or "Ravished ball room" will again assume a gala-like appearance when the long-promised, much-talked-of, eagerly anticipated theatricals will take place. The bill of play consists of two pieces, "In Honour Bound," and "A Trip to Paris and back for Five Pounds." The latter has been written up to date by the facile pen of the Bird of Prey, who has also added an entirely new and topical scene to the farce. Everyone is looking forward to a most excellent and enjoyable entertainment.

During the past few weeks pass lists of the various "Higher Examinations" have been published in rapid succession, the Guy's results have been uniformly good, almost to monotony. Of ten Guy's men up for the final fellowship, six passed—a very good proportion for that examination. In the London M.B. Honours, Mr. H. C. Keates has to be congratulated on getting a first class in Medicine, and in the M.D. Mr. Telling on obtaining the Gold Medal. Messrs. Dunston, Eason, East and Julius Moore all passed. A large proportion of our men passed at the recent Oxford and Cambridge exams.

To please everybody is never an easy task, and by no means always a desirable end; but the recent list of clinicals seems to have satisfied everyone's idea of right and justice. The six new clinicals are to be congratulated on getting their appointment in the face of some hot competition.

May we remind men that there is a subscription list open, as in former years, for the benefit of the College servants? There are many calls upon the purse of a hospital man at this festive season, as we all know, but this cause deserves the support of everyone. The servants at the College have longer hours than most and are not allowed to receive gratuities except by this Christmas collection, and we trust that it will therefore be of proper proportion.

Although we must congratulate Mr. W. C. C. Pakes, who is proceeding at the end of next month to take up the appointment of Analyst and Bacteriologist to the Transvaal Colony, he will be much missed at the hospital, and his

place will not be easily filled. He has most ably filled his position here, and has besides done yeoman service to the Debating Society, raising it from a slough of despond into the position it holds to-day. We wish him every success in his new venture, and it is not too much to expect that his versatile and cosmopolitan accomplishments will make him as popular a figure as he has been at Guy's.

The testimonial to Mr. Collier was presented to him on December 16th, and took the form of an illuminated address signed by practically everyone on the staff of the hospital, and a number of solid silver articles. Mr. Collier, we are glad to hear, has profited by his rest, and we hope, will for many years be cheered by the fact, that his long service to the hospital has been recognised in a fitting way by all who had the pleasure of knowing him in his work here.

The interval in the winter athletic season has reached us, and every Guy's man can look back with satisfaction on the termination of the first half of the present football year. Our Rugby team has proved itself to be one of the best we have ever put into the field, and after beating many good teams, including Blackheath, in which match of course we were as usual combined with St. Thomas's, we finished up on Saturday last by beating such doughty opponents as the London Scottish. The Association team has not a good record, but the result of the Cheshunt match shews that they are a better side than the match card would indicate. The team is composed of good sound players, but they have not up to the present made such a display as they ought, owing to the lack of combination. On one point, however, and that one which was so remarkably weak in last year's final, viz., vigour in play, they shew a decided inprovement, and if the team gets well together and trains hard, we think they will make a good fight for the cup.

Against the London Scottish at Richmond on December 14th, it is not too much to say that our 1st XV. made a very fine display, in beating them by three tries to one. A very pleasing feature was the excellent form shewn by our forwards against the strong and heavy pack of our opponents. The Scottish forwards were undoubtedly better than ours, but owing to the smart way in which our men got the ball out of the scrum, our outsides had plenty of chances. It is due to the lack of this, that our forwards have not up to the present been so good as one might wish, and the improvement is most welcome, as it shews that they can rise to an occasion when called upon. The outsides were in their usual form, which is saying a good deal, and outclassed the opposing team, Alcock in particular was noticeable, and one of his tries was a model in powerful running. Altogether we have a splendid team to represent us, and also some reserves that would do credit to any team. The only improvements now needed are good place-kicking and training to fit us for the Cup Ties.

We are all most delighted to see that our three-quarter, E. Morgan, has been selected to play for Wales, and we heartily congratulate him upon the honour that has been conferred upon him.

The coloured supplement that accompanies this issue is a fac-simile of the programme for Christmas Day, which is given, as in former years, by Messrs. Ash & Co., the publishers of the Gazette. We should like to take this opportunity of showing our appreciation of their gift, and at the same time to thank them, and in particular Mr. Fenn, in whose hands the production of the Gazette mainly falls, for their unfailing courtesy and ready assistance, without which the work entailed by the Gazette would be largely increased.

We are glad to hear that an old Guy's H.-S. has forwarded a cheque for the various Christmas funds in connection with the hospital, and we trust that his generous example may be followed by others who have spent many a happy Christmas in our wards.

The *Lancet* records the death of Deputy Inspector-General Piers, at the ripe age of eighty-four; he was a Student at Guy's as long ago as 1840. One of the most interesting and eventful episodes in his life, happened when he

was acting as Assistant-Surgeon to the expedition that sailed to find Sir John Franklin. In this it failed, but succeeded in discovering the north-west passage. On Mr. Piers' return he received the Arctic medal.

The concerts in the wards will take place as follows:—

		p.m.
Thursday, Dec. 26.	Ruth & Barnabas ...	4
Friday, Dec. 27 ...	Charity	4
	Medical Wards ...	5
	Dorcas	4
Saturday, Dec. 28.	Lazarus	5
	Cornelius	6
	Naaman	6
Monday, Dec. 30.	Luke	6
	Lydia	5
	Patience & Samaritan	6
Tuesday, Dec. 31.	Astley-Cooper .	7
	Job	5

Correspondence.

To the Editor of Guy's Hospital Gazette.

Presentation to Mr. Collier.

Dear Sir,—The enclosed is a copy of the illuminated address to Mr. Collier, presented to him yesterday, together with tray, tea and coffee set, hot-water jug, and pair of candlesticks, all of solid silver.

The signatures to the address include those of the present and late Treasurers, the Consulting and Acting Staff, and practically all the officials of the hospital.—Yours faithfully, HENRY WILLIAMS, Clerk.

Counting-house, Guy's, December 17th, 1901.

To Mr. HENRY COLLIER.

Dear Mr. Collier,

We, the undersigned fellow-workers and friends at Guy's Hospital have learned with regret that, in consequence of ill-health you have felt obliged to resign your position as Senior Dispenser to the Hospital.

During the twenty-seven years you have been amongst us we have a pleasing remembrance of having received at your hands much courtesy, willing help and kind consideration, and we earnestly trust that, relieved from the strain of work in the highly responsible position you have held here, you may regain in a large measure health and strength to enable you to pass many years of quiet enjoyment with your family.

We are gratified to know that the Governors have recognised your faithful services by granting you a pension on the higher scale, and we would ask you to accept as a slight mark of our own high regard the accompanying gift of silver plate.

Michaelmas, 1901.

Memoirs of Celebrated Physicians who flourished in the Reign of Queen Anne.

By H. LAVERS-SMITH, B.A.

No. 1.

Dr. JOHN RADCLIFFE, M.D.

The fact that "Queen Anne is dead" is so well ascertained that the saying passes among the irreverent as a mild protest against the introduction of stale news. To revive the memory of those who were directly associated with her person may therefore be thought a hazardous proceeding, and to include us in the category of those who love to deal in the obvious. This risk must be accepted; for those who travel along well-beaten paths, when the conditions are dry, cannot always expect to escape dust.

Perhaps at no other period of history has the medical profession been represented by men of greater distinction than those who flourished during this reign, though it is true their reputation rests as much upon their literary and social attainments as their necessarily limited success as practitioners. Arbuthnot, Garth, Freind, Mead, Blackmore and Radcliffe are names which constantly recur in the social Memoirs of the Augustan era, and were men who achieved a celebrity outside the precincts of their immediate profession.

Dr. John Radcliffe, the subject of this brief memoir, was like Falstaff, not only a wit himself, but the cause of wit in others. His originality of character, disregard of settled forms and precedents and love of ostentation could not fail to invite the ridicule of his political opponents, and subjected him to bitter attacks by other members of his profession, who still culled their prescriptions from the treatises of Hippocrates and Galen.

Born at Wakefield, in Yorkshire, in the year 1650,[1] he received his early education at the Wakefield Grammar School, where that prodigy of learning, Dr. Richard Bentley, afterwards became a distinguished scholar.[2] Though his claim of relationship to the celebrated Northumberland family of this name passed undisputed during his lifetime, and was acknowledged by Lord Derwentwater, it is necessary to observe that the College of Heralds objected to the Radcliffe escutcheon being placed over any monument erected to his memory by the University of Oxford.[3] However equivocal the claim, a Bend in Graile Sable Field Argent was displayed, doubtless with suitable flourishes, on the panels of his coach, and is still to be seen beneath the engraved portrait by Van der Gucht, a copy of which is now before the

1 Lupton's Wakefield Worthies, 1864, 104.

2 Nichol's Illustrations of the Literature of the 18th Century, 1 17, vol. 1, p. 748.

3 Some Memoirs of the Life of John Radcliffe, M.D., 1715. The British Museum copy has two separately published supplements containing the text of his will and other matter. This book was published under the suspicious auspices of Edmund Curll and is woefully inaccurate in its dates, but still constitutes the principal source of information about Dr. Radcliffe.

present writer. At the early age of fifteen[4] he entered University College, Oxford, as Battler, a term which is unfamiliar, but seems to imply an allowance of "battels" at the expense of the college, such as was enjoyed by Dr. Johnson at Pembroke College at a later period. In 1669[5] he took the Degree of Bachelor of Arts, and obtained a fellowship at Lincoln College, this addition to his slender resources enabling him to devote his studies to medicine. Three years later, after passing the exercises "with uncommon applause," according to his biographer, he duly passed to the higher degree of Master of Arts. Those who are acquainted with the nature of these exercises--the Quolibet Disputations, Declamations, "Six Solemn Lectures," and other antiquated forms observed at Oxford before the days of competitive examinations,[6] will be disposed to make allowances for the doctor's ill-disguised contempt. As he bluntly informed Obadiah Walker in later years, when that enthusiast endeavoured to convert him to Popery, "he had no relish for absurdities." So scanty was his library that Dr. Bathurst, Head of Trinity College, once asked him, "Where was his study?" on which, pointing to a few vials, a skeleton and a Herbal, he replied, "Sir, this is Radcliffe's Library."[7] He once declared that he could write all that there was in physic in a half sheet of paper, that is to say "all he knew of it," as the person remarked to whom the observation was made.[8]

Taking the degree of Bachelor of Physic in 1675[9] he then commenced to practice at Oxford, where his original methods and outspoken opinions soon involved him in bitter disputes with rival practitioners, who endeavoured unsuccessfully to ruin his reputation. At this period an epidemic of small-pox was raging in Oxford, and it was his success in treating these cases by giving his patients air and "cooling emulsions" (much after modern methods) which first gained him notoriety. His practice gradually extending among aristocratic circles brought him rich rewards, and in 1684 he came to London, and settled in Bow Street, Covent Garden, with an established reputation.

Speaker Onslow, who would not have committed himself to the statement except under compulsion, being least disposed in his favour, observes that "he was deemed the ablest man in his profession, not from any learning in it which he would be thought to despise, but from an extraordinary sagacity (which he certainly had and is a great talent) in an early and quick discovery of a distemper."[10] Dr. Mead, a more competent judge, attributes his success to the same cause, remarking that "he was deservedly at the head of his profession, on account of his great medical penetration and experience."

Alumni Oxonienses, 1891, vol. iii., p. 1228.

5 Alumni Oxonienses, ut supra.

6 See Dr. Birkbeck Hill's chapter on early Oxford life in his "Dr. Johnson, his Friends and his Critics," 1875.

7 Memoir of Radcliffe, as above.

A letter from a Citizen of Bath to Dr. R—— at Tunbridge, 1705.

9 Alumi Oxonienses ut sup.

10 Note on Burnet's History of his own Time, 1833, vol. iv., p. 245.

(Richardsoniana, 1776, 316). According to the admission of his apothecary he was earning over twenty guineas a day before a year was out. Truth to tell, this popularity and influx of fees appear to have turned his head, and led him to assume airs of self-importance and a haughtiness of manner which did not pass unchallenged.

The garden at the back of his house adjoined a much finer one belonging to Sir Godfrey Kneller, the celebrated painter. As they were intimate the doctor induced his friend to allow him to construct a doorway in the partition wall, in order that he and his family might have greater liberty of walking in Sir Godfrey's grounds. The request was granted, but the arrangement did not last long, for the doctor's servants abused the privilege and damaged the flowers. Sir Godfrey expostulated without effect; at last goaded by desperation he sent his servant with the message "that he should be obliged to brick up the door in case of his complaints proving ineffectual," to which the doctor replied "that Sir Godfrey might even do what he thought fit in relation to the door, so that he did but refrain from painting it," a neat reply, but not more pointed than the message returned by the exasperated painter:—"Go you back to him, and after presenting my services to him, tell him, that I can take anything from him but Physic."

Some of the stories recorded of Dr. Radcliffe are so free in character they do not admit of repetition. A characteristic one, not liable to this objection, affords a further specimen of his very caustic wit. Sir Edward Hans, when a budding practitioner, used to seek notoriety by highly unprofessional expedients, and went to the length of instructing his servant to stop coaches on the public highway, and make enquiry for him of the occupants as though he were summoned to attend titled patients. On one occasion the servant appeared at Garraway's Coffee-house when Dr. Radcliffe happened to be present, and made the regulation enquiry. Of course he was told that his master was not there, and Radcliffe asked the man who it was that required his services. This was the very question the man was angling for, and, according to instructions, replied "my Lord this, and my Lord that" wanted him. "No, no, friend, you are mistaken," cried Radcliffe, "the doctor wants those Lords."

On one occasion he seems to have met his match. A paviour, who had executed some repairs to the pathway fronting his house in Bloomsbury Square (whither he had removed from Bow Street), could not get his account settled, but happening to catch the doctor just as he was alighting from his chariot brought it once more to his remembrance. "Why, you rascal," cried the doctor, "do you pretend to be paid for such a piece of work? why, you have spoiled my pavement, and then cover it over with earth to hide your bad work." "Doctor," replied the man, "mine is not the only bad work that the earth hides."[11]

Though not like Cæsar's wife, "above suspicion" in his own practice, he was very disposed to ridicule the

11 Richardsoniana, 1776, p. 316.

quack doctors who abounded in such numbers in the palmy days of Charles II., and especially that branch denominated "Urinal-Casters," who pretended for a small fee to diagnose complaints from an inspection of the water. This fiction proved very popular with ignorant people, as it saved the trouble of attendance. One day, a poor shoemaker's wife came to see Dr. Radcliffe with a sample of her husband's urine, expecting to receive sound advice. "Where is he?" cried the doctor. "Sick in bed four miles off," said the woman. "And that's his water, no doubt," he remarked; whereupon, calmly emptying the vessel, he re-filled it with his own water, and returned it to the good woman, saying, "Take this with you home to your husband, and if he will undertake to fit me with a pair of boots by the sight of my water, I'll make no question of prescribing for his distemper by a sight of his."

In politics, he was a violent Tory, and this may have influenced him in later years to reject the appointment of Court Physician to King William, who offered to increase the salary by £200 as an inducement to him to accept the post. Perhaps the refusal may have been partly dictated by jealousy of Dr. Bidloo, a favourite Dutch physician, who was retained by the Court; but it did not prevent his being repeatedly summoned to prescribe for the king, who, it is well known, was very delicate, and constantly afflicted with asthma.

William was grateful to him for restoring to health two of his prime favourites (Bentinck, afterwards Earl of Portland, and Zulestein, Earl of Rochford), and his services were rewarded on almost the same liberal scale as the king's Dutch companions. His biographer reports that he had heard the doctor declare: "That one year with another for the first eleven years of his reign, he cleared more than 600 guineas for his bare attendance on the king's person, exclusive of the great officers." For attending the Earl of Albemarle, who was stricken down with fever while on a foreign campaign, the king awarded him a treasury grant of £1,200, in addition to his fees. He also offered to make him a baronet, but this dignity the doctor refused, on the ground that he had no children to inherit it.

Having regard to the king's exceptional liberality it is surprising that the doctor was not more careful to preserve his good opinion, and chose to risk giving offence rather than miss the opportunity of a joke. His majesty's constitution was debilitated with the worry and exertion entailed by frequent foreign campaigns, and was further undermined, it is reported, by intemperance. On one occasion he was consulting Dr. Radcliffe about his gouty tendencies, and exhibiting his swollen ankles, said, "Doctor, what think you of these?" "Why, truly," replied Radcliffe, "I would not have your Majesty's two legs for your three kingdoms." No notice was taken of this freedom at the time, but it was remarked that the doctor was not consulted on future occasions.

In December, 1694, he was summoned to attend Queen Mary who was taken suddenly ill. Her case was one of small-pox of the worst type and all remedies proved unavailing. Bishop Burnet, whose well-known political opinions prejudiced him against any person who did not happen to share them, makes the gravest charges against the doctor, at the same time, and with his usual lack of consistency, admitting himself a bad judge of the merits of the case. A suppressed passage of his history runs:—"I will say no more of the physician's part but that it was universally condemned; so that the queen's death was imputed to the unskilfulness and wilfulness of Dr. Radcliffe, an impious and vicious man, who hated the queen much, but virtue and religion more. He was a professed Jacobite; and was by many thought a very bad physician, but others cried him up in the highest degree imaginable. He was called for; and it appeared but too evidently his opinion was depended on. Other physicians were called when it was too late."[12] At this distance of time and without certain information as to what actually took place it is difficult to determine where the blame (if any) should be laid, but Luttrell records that on the fourth day of her illness "her physicians perceived it to be the measles," and on finding their mistake next day "prescribed that her Majestie should be again lett blood, and scarifyed in the forehead to prevent the effects of St. Anthony's fire and had diverse bli-ters made to keep it from her head."[13] This rather tends to confirm the account given by the author of the Memoirs, who implies that Dr. Radcliffe was not summoned till it was too late, when he boldly accused the court physicians of wrong treatment, and attributed her death to improper medicines. On the dubious authority of an anonymous tract, containing a mock defence of the medicinal properties of the Bezoar stone, we learn that this was one of the drugs administered on the occasion[14]; but for all the good it effected, the poor queen might just as well have swallowed a few grains of pulvis æthiopicus, another sovereign remedy for small-pox, prepared from the ashes of burnt toads, which a pharmacopœia, with unconscious humour, describes as "a certain help for such as are ready to die."[15] It can at least be said that, in popular estimation Dr. Radcliffe was held the first authority of his day in cases of small-pox and gout,[16] and perhaps if Blackmore, or some other stout Whig had acted as principal adviser on the occasion, Bishop Burnet would have dwelt less upon the negligence and incapacity of the doctor than the hopelessness of the case. Dr. Radcliffe did not live to witness a celebrated controversy, in which Doctors Freind, Woodward, Wagstaffe and others engaged soon after the death of Queen Anne, a dispute which was carried on with an

12 M.S. quoted by Miss Strickland.

13 Luttrell's Diary, 1857, 417.

14 "A Nice Cut for the Demolisher," 1715. The Bezoar Stone formed the principal ingredient of the then fashionable Gascoign Powders.

15 See Some Curious Extracts from early Pharmacopœias in Ashton's Social Life in the reign of Queen Anne, 1882. Vol. II, ch. 30.

16 Wyon's History during the Reign of Queen Anne, 1876, vol. ii., p. 524.

equal display of learning and animosity, and appears to have principally turned upon the relative advantages of purging in the second fever of confluent small-pox.[17]

In 1692, he suffered a great reverse of fortune, losing £5,000 with a merchant vessel captured by a French privateer on her return passage from the East Indies. The investment had been made under persuasion of the celebrated actor Betterton, who himself lost heavily in the venture.[18] When the news reached him he was drinking with friends at the "Bull Head Tavern" in Clare Market, but "without baulking his glass," as his biographer tells us,—it appears from all accounts that he very seldom did "baulk" it—he bid the healths go round, smilingly remarking, "that he had no more to do, but to go up 250 pair of stairs to make himself whole again."

It is only too evident that indulgence in wine was his besetting weakness, and he paid dearly for his indiscretion, for it was the occasion of his forfeiting the favour of Queen Anne, and probably the cause of his death. He had been appointed physician to Princess Anne in 1686,[19] but a few months after the death of Queen Mary he incurred the former's displeasure by neglecting to attend a summons, which chanced to arrive at one of his least accessible moments—as he was cracking a bottle with some friends at a tavern. A second message was despatched before he could be induced to leave the company, to whom he complained, with great want of discretion, about the hardship of being called away to attend a lady who was only suffering from "vapours." This little speech reached the ears of the Princess, to whom it naturally gave great offence, and when she succeeded to the throne he was struck off the roll of Court physicians.[20] The breach was never made up, and we meet with an allusion to it in the journal to Stella, where Swift records dining with Lord Oxford on 17th July, 1711, and conferring with him about the queen's health, "I find he is against her taking much physic; and I doubt he cannot persuade her to take Dr. Radcliffe." From the statements of his earliest biographer it seems that he was not summoned to attend the Duke of Gloucester, during his last illness, until the duke was past the hope of recovery, although he was openly accused of neglecting to tender advice by those who cannot have been aware of his unpopularity. Mr. Thomas Brown, "of facetious memory," who contrives to be funny even in his elegiac moments, was clamorous on the occasion:—

"In vain we grieve, in vain we waste our eyes
And with expostulations rend the skies;
All our complaints we must on Ratcliffe spend
Who, for his pleasure, can neglect his friend;
By whose delays more patients sure have dy'd
Than by the drugs of others, misapply'd."[21]

Dr. Radcliffe's relations with the opposite sex furnished abundant sport to the wits of his time. Sir Richard Steele, the most sympathetic and tender-hearted of mortals on common occasions, lost all sense of compassion towards a political opponent, and cruelly ridicules a love affair which had come to his knowledge. There would be no difficulty in identifying the doctor under the thin disguise of Æsculapius, and the story had probably been well circulated among the coffee-houses so as to be easily recognisable by the readers of "The Tatler." This amusing piece of raillery, thrown off with Steele's accustomed facility, is too long to extract in the narrow limits of this article, but can be consulted in the 44th Number of Mr. Isaac Bickerstaff's immortal periodical.[22] Fate seems to have decreed that the doctor should live in single blessedness. In 1693 he was on the brink of matrimony with the daughter of a wealthy merchant, and the match was only broken off by an unexpected discovery, which made it too apparent that the lady was about to contract herself to the wrong man.

At the British Museum is preserved a furious attack on Dr. Radcliffe, contained in "A Letter from a Citizen of Bath to Dr. R—— at Tunbridge," 1705, probably the first literary essay of some apothecary, who dates "From my shop in Bath." This tract was the outcome of some obscure quarrel with the Bath physicians, who are reported to have slighted the doctor on the occasion of a visit to Bath, not knowing "what Puncto and Adoration was due to so great a grandee in Physick, and the mighty Pam of the Faculty." In retaliation for this supposed want of respect the doctor is accused of having made certain threats, which the author gravely enumerates in turn:—

"Firstly.—That you will put a Toad in our Waters.

Secondly.—That you [will] spoil the trade of the Bath waters, by G —— you will.

Thirdly.—That you will bring our Lodgings to half a Crown a week."

Then follows a fierce fusilade of abuse, which would not disgrace the vocabulary of an Irish member:—"You are no Infallible Doctor, whatever you think yourself; tho' you boast you can feel a Stone in the Kidneys by the Pulse, and sometimes when there is none," etc., summing up in the following happily chosen quotation from the poets:—

"A Man of unrecorded Insolence;
Ill-manner'd, loose, and noisy without sense.
Defaming all, in his own Praises loud,
Vain without skill, and without Merit proud."

This was not the only apothecary with whom he had a difference of opinion, as appears from the following entry in Luttrell's diary:—"6 July, 1704. Mr. Coatsworth, an apothecary in St. Martin's Lane, convicted in Easter term, upon an information in the Queen's Bench, for assaulting Dr. Ratcliffe, at Tom's Coffee-House, by spitting in his face, upon some words that arose between them, was upon Monday fined 100 marks, which he paid into Court."

The following year, as recorded in Spence's Anecdotes, he was consulted by Pope, whom he advised to study less

17 See Nichol's Literary Anecdotes of the 18th Century, 1812, vol. v., p. 95.

18 Thomas Betterton, by Lowe, 1891, p. 145.

19 Biographia Brittanica, 1747–65, art. Radcliffe.

20 Wyon's Reign of Queen Anne, ut supra.

21 Works of Mr. Thomas Brown, 1730, vol. vi., p. 316.

22 "The Tatler," 21 July, 1709; see also Nos. 46, 47, 50 and 67.

and ride more ; advice which seems to have been adopted with some measure of success.

In 1711 Count Guiscard made his celebrated attempt on the life of the Lord Treasurer Harley, and Dr. Radcliffe was called in to attend him. This affair is so much a part of history on account of the political capital made out of it by the Tory party, and by reason of its forming the first slight cause of disagreement and jealousy between Harley and Bolingbrooke, it is needless to repeat the story. Here again, the doctor's private animosities were once more in evidence. He refused to meet Mr. Bussiere, who first dressed the wound, and substituted his own surgeon in his place, thereby, according to Swift, retarding the patient's recovery.[23]

Dr. Radcliffe was now advancing in years. Many of his old friends had predeceased him, and being of a companionable disposition he felt the loss accutely. In 1713 he was elected Member of Parliament for Buckingham, and as the duties obliged him to neglect his practice, he singled out Dr. Mead, then a rising practitioner, as his successor, and recommended him to his patients. It was to Dr. Mead that he handed over his celebrated gold-cane, that indispensable appendage of a prosperous physician of the period. This interesting relic, which afterwards passed into the possession of Drs. Askew, Pitcairn, and Baillie, is now preserved under a glass case in the library of the Royal College of Physicians. The stick is a malacca of rather inconvenient length—one of those "clouded canes" the nice conduct of which Pope's typical Exquisite was so justly vain—and the crook is of gold, on which each possessor in turn has engraved his arms.[24] On the occasion of its presentation to the College by the widow of Dr. Baillie, a small volume of memoirs was published with the title of "The Gold-Headed Cane," giving an account of the lives of the celebrities through whose hands it had passed. The College also possesses a fine portrait of Dr. Radcliffe, by Kneller, painted in 1712. It hangs in the Library in rather a bad light, and is perhaps the original from which engravings were made by Vertue, Burghers, Fourdrinier, and others, fine examples of which are to be found in the portfolios of the Royal College of Surgeons.

In 1714 the queen died, still unreconciled to Dr. Radcliffe, who incurred a great deal of odium from the report that he had refused to attend her death bed when summoned by a messenger of the Council. His accusers[25] have, however, overlooked the fact that he was then confined to his country house at Carshalton with a severe attack of gout. From a letter written by him at this time and printed in the Memoirs it appears that he was never officially summoned on account of his unpopularity at Court, and the message had been despatched without the privity of the Queen or Council by "Lady Massam" [Masham], the writer adding "as ill as I was, I would have went to the Queen in a horse-litter, had either Her Majesty, or those in commission next to her, commanded me to do so." Popular feeling ran so high, a member of his own party brought the matter to the notice of the House, and it is further said that his life was threatened. This aspersion greatly distressed him, and hastened his end. He died on 1st November, 1714, and was buried with great ceremony at St. Mary's Church, Oxford. The authorities evidently foresaw the likelihood of some popular demonstration by the undergraduates for "All persons whatsoever were enjoined upon the strictest Penalties, not to tear off the Escutcheons, or to make any Disturbance in the Church, the Divinity School [where the body lay in state for public view for three days] or in any part of the Procession."

Dr. Radcliffe was ever ready to relieve the wants of those less fortunate than himself, and the letters preserved by his earliest biographer are evidence of his charitable disposition. The younger Richardson has reported some statements made by Dr. Mead, which must be received with some suspicion,[26] and come with a very bad grace from one whom Radcliffe had so befriended. The allusions to his alleged stinginess, and a shabby practice of evading tavern reckonings, under the plea of "hating to change a guinea," do not seem to accord with the many recorded instances of his liberality and charity. He died possessed of a large estate, the greater portion of which was bequeathed to the University of Oxford. By his will, a rather slovenly drawn instrument, he made provision for two travelling scholarships, open to Masters of Arts "entered on the physic line," and left £40,000 for the erection and endowment of a library, now known as the Radcliffe Library, which was not completed until 1747.[27] The Observatory and Public Infirmary were afterwards erected from the proceeds of this fund. These benefactions did not escape censure and ridicule. Pope has made a slighting allusion to the medical scholarship in these lines:—

"E'en Radcliffe's Doctors travel first to France
Nor dare to practice till they've learnt to dance."[28]

and Dr. Johnson, who, like Tago, was "Nothing if not critical," expressed the opinion that they never did any good.[29]

A recent writer[30] is at a loss to understand why no monument was erected to the memory of Dr. Radcliffe in St. Mary's Church, but the authorities probably thought that the Library itself constituted a sufficient memorial. The inscription which is still to be read on the face of St. Paul's Cathedral, "Lector, si monumentum requiris, circumspice," is a more eloquent tribute to the genius of Sir Christopher Wren than any work of the

23 Journal to Stella, 26 March, 1711.

24 The writer has been privileged to view this curiosity through the courtesy of the College Secretary, who possesses a rich fund of information and anecdote about the exhibits under his charge.

25 See a note by Speaker Onslow in Burnet's History of His Own Time, 1833, vol. iv., p. 245.

26 Richardsoniana, 1776, p. 316.

27 Biographia Brittanica, ut sup.

28 Epistle II., 1.

29 Boswell's Life of Johnson, Oxford edition, 1887, Vol. IV. p. 293.

30 The Church of St. Mary the Virgin, Oxford, by T. G. Jackson, 1897, p. 198.

statuary. It is also more economical. In process of time the exact site of the grave passed out of memory, and was only revealed during some repairs to the church in 1820. A gold plate was then found with the simple epitaph :—

JOHN RADCLIFFE, M.D.
Died November 1st, 1714.
In the 65th year of his age.[31]

Reviews.

The price of books submitted for review should in every case be stated.

A Doctor in Khaki. By Francis E. Fremantle, M.A., M.B., B.Ch. (Oxon.), M.R.C.P., late Civil Surgeon to H.M. forces in South Africa. (London: John Murray). 10s. 6d.

We find it anything but an easy task to review this book. There is so much that is of real sterling value, and so much that were better left unsaid, that the mind is continually racked by the conflicting emotions evoked in the reading of it. Perhaps much may be accounted for in the consideration of Mr. Fremantle's appalling ingenuousness. The lack of knowledge of his fellows, of their manners and probable customs, which he evinces from time to time, is positively wonderful. For instance, right at the beginning of the book (p. 26) he writes: "After dinner, the men gave a variety entertainment on our deck, a most curious medley of patriotic, foul, and sentimental songs, half to the accompaniment of the pioneer-sergeant's concertina—rather a dreary performance. After all, an army represents fairly well the scum of the earth, at its very best. . . . ." Has Mr. Fremantle never realised that a body of men, no matter from what path of life they be drawn, when placed under novel and less perfectly civilised conditions, when forced to rely solely upon themselves for their amusements and general social intercourse, inevitably become less refined, more brutalised than when under more favourable conditions. Surely he must have noticed this amongst his contemporaries, both at Oxford and Guy's. Three or four men on a fortnight's holiday together, on a Norfolk wherry, invariably show at the end of their holiday a marked revertence to the manners and customs of primeval man. We doubt very much whether Mr. Fremantle's estimation of the composition of "Tommy" will be endorsed by his officers. Nor will it receive confirmation at the hands of those who have had the opportunity of studying the soldier as he is, and not as he is painted. Further instances of Mr. Fremantle's simplicity might be cited, but the reader will doubtless prefer to find them for himself. We must, however, in this place remark on the needless explanation which the author considers as due to his readers. Few people, we should imagine, need the explanatory note (p. 441) on the "Whitewashing Commission." It is not the first time in the world's history that those two words have been used in juxtaposition, and every one prefers that a writer should pay his readers the delicate compliment of supposing that they are not absolutely ignorant of current topics.

We must confess that we do not see the necessity of retaining in the book the numerous general allusions to the war. Such as were directly in the writer's ken, of course, deserve a place, but we hardly expected to find, in a book published towards the close of 1901, to hear of the "splendid victory at Talana Hill, near Glencoe." The section of the general public that reads khaki books for their own sake has been reminded often enough of the great engagements of the war, and only wants to hear of them again when some additional features can be added by an eye-witness. So much for the powder. We can now come to the jam.

The book is well printed, well put up, and copiously illustrated; this creates a first favourable impression. The writer's style is generally pleasing, and is not marred by an excessive use of the personal pronoun. Naturally, in such a work as this there is a tendency for each page to bristle with "I's" like a hedgehog with spines. Mr. Fremantle has avoided as far as possible the use of this irritating pronoun.

His views on things in general, and medicine in particular, are expressed in a most praiseworthy spirit of fearlessness. When recalled and reprimanded for his outspoken criticism he maintatned his position with great firmness, and in the end, won his case. All this is set forth in the book with appropriate modesty. When dealing with the medical departments, his judgments are crisp and apparently accurate, and in the appendices at the end of the volume, Mr. Fremantle manages to cram an enormous amount of interesting and useful information. We must always except, however, the general information, Appendix E, which gravely enlightens us upon the meaning of such words as "kopje" and "veldt." On the whole, the book fills a gap in the ranks of our war books, and fills it efficiently. No one who professes to take any interest in our army at home and abroad can afford to neglect this latest contribution on the subject.

Text Book of Pharmacology and Therapeutics. (Published by Young J. Pentland).

This work, which is edited by Dr. Hale White, is written by some twenty-nine contributors, amongst whom are so many well-known names that it would be invidious to pick out any particular writers, but we may be allowed to say that the following members of our Staff are responsible for chapters. Dr. J. H. Bryant, Dr. Pembrey, Mr. Rowell, Dr. Savage, Dr. J. W. Washbourn, and Dr. Hale White.

The editor points out in his preface that the book deals with pharmacology and therapeutics, and is *not* a work on

31 Munk's Roll of the Royal College of Physicians, 1878, Vol. I., p. 456.

materia medica, hence the natural history, source, etc., of drugs are for the most part omitted.

The introduction, written by Mr. F. Gowland Hopkins, discusses the position reached by modern research with regard to the relation between the chemical constitution (and in certain cases the physical properties) of drugs and their physiological action. The problem is full of difficulties, but writing in a clear lucid style, the author has produced one of the most interesting and suggestive chapters in the book.

Dr. Mackenzie, writes the article on organotherapy and considers the administration of preparation from various organs. The chemical nature, pharmacology of the thyroid body naturally takes up the greater part of this section, its use in myxœdema, cretinism, etc., goître, being fully treated of.

The important section on Serum Therapy has been intrusted to Dr. Washbourn, who has produced a most exhaustive article. It is interesting to learn that the introduction of antitoxine in cases of tracheotomy for diphtheria in children under 5 years at Guy's has reduced the mortality from 76·7 per cent. to 28·2 per cent. With regard to inoculation against typhoid, he says, it is at present impossible to arrive at any definits conclusions as to its efficacy, but in India the incidence of typhoid fever was ·95 per cent. among 2835 men inoculated, and 2·5 per cent. among 8460 men who had not been inoculated.

Amongst some of the best chapters in the book are those written by the editor, dealing with mineral waters, various forms of baths, massage, Weir Mitchell treatment, venesection. These will be found of the greatest practical value.

Dr. Bryant gives a very complete essay on the uses of electricity in medicine, including the Röntgen rays.

Diet, climate, and the effect of rest and exercise on chronic heart cases are other striking chapters.

Though the accounts of the several drugs are very complete, considerable discretion has been shown in allotting the space, and unimportant drugs are not allowed undue attention, those which are pharmacologically or therapeutically unimportant being collected together.

Space prevents our giving a more detailed account of this book, but we hope this has been sufficient to show what a complete work has been brought together under Dr. Hale-White's editorship. That it will be the standard one on the subject almost goes without saying, and for reference and practical guidance it will be found invaluable.

NOTICE TO CORRESPONDENTS.

The Editor wishes it to be understood that no communications can be inserted which are not guaranteed by the name of the sender. All articles must be written on one side of the paper only.

Sport.

Rugby Football.

GUY'S v. LONDON SCOTTISH.

Played at Richmond, on Saturday, December 14th, in very boisterous weather, but before a very fair attendance. Cutler and McEvedy were away, otherwise the team was as usual.

The Scottish kicked off against a strong wind blowing obliquely across the ground, and at the very commencement pressed, relief being brought by an excellent kick by Alcock across the ground. Within ten minutes of starting Lawry got the ball well away to O'Brien from a line out, and a round of passing was started which enabled Morgan to make a pretty dodging run past the full-back, and score between the posts, the greasy state of the ball preventing O'Brien from kicking the goal. Our halves particularly were playing well, and we continued to press, helped by an off-side given against the Scottish. Wetherell shortly after got the ball well away to Orpen, and the latter made a good run, eventually passing to Alcock and enabling that player to score wide out, the try not being converted. The Scottish pack, who were a heavy lot, were now seen to advantage, and rushed the ball down the field several times, the tackling of our centre three-quarters seeming to lack nerve and determination in dropping on the ball. From one of these rushes in the right corner, the Scottish scored, J. Ross making an excellent attempt at goal. Morgan and O'Brien soon took the ball back into their twenty-five, where off-side was given against the Scottish, Rendall's shot at goal, however, being a poor one. We continued to have the best of it until half-time, when the score stood: Guy's, 2 tries; Scottish, 1 try.

On restarting, the Scottish had the wind with them, and had more of the game than previously, but their backs were slow, and missed many good opportunities, the forwards doing all the attacking, Harrison only just being in time on one occasion to kick dead. Payne got well away once, but on kicking across, the wind took the ball, and one of the Scottish got it, preventing what would probably have been a useful run on the right wing. Shortly after this Alcock made a magnificent run. Receiving from Wetherell about half way, he ran straight through, after being brought down on to one knee, but recovering quickly, succeeded in just crossing the line—as powerful a run as most people have been fortunate enough to see. Harrison made an excellent attempt at goal from a difficult position. Towards the end it began to get dark, and although the Scottish forwards pressed hard, they could not succeed in scoring, and so we won a well-deserved win after a most interesting game by 3 tries to 1 try. Team:—

GUY'S.—E. M. Harrison (back); E. Morgan, A. O'Brien, L. J. J. Orpen and F. Alcock (three-quarters); M. C. Wetherell and O. V. Payne (half-backs); R. C. Lawry, A. R. Thompson, R. G. Anderson, B. Glendinning, E. L.

Ward, E. H. B. Milsom, H. M. Tolhurst and —. Rendall (forwards).

REMARKS. — Considering the weighty pack against them, our forwards did excellently. They appreciated the fact that they were beaten in the loose, and simply played up to the backs, letting out the ball smartly and working hard in the scrum, tactics which, we think, might be advantageously practised, whoever our opponents may be, so long as our backs retain their present standard of excellence. One of the most noticeable failings of the team is its inaptitude for place-kicking. Practice *on exactly the same lines as in a match* seems the best and only solution.

GUY'S v. NORTHAMPTON.

This match, played at Northampton on Saturday, 7th inst., proved a disappointment for the hospital supporters, as, instead of making a close thing of it, Guy's met with a severe reverse. Taking down a team weakened by the absence of Morgan, Payne, and Louisson, they met with a very strong lot on the home side, who are, moreover, assisted by acquaintance with a ground which is apt to cramp those unaccustomed to it. The game started in a scrambling fashion, the home forwards hustling Guy's with a series of well concerted rushes, and, after ten minutes' play, Simmonds drew first blood with a penalty goal. Guy's worked back to half-way, and had the three-quarter line passing been crisper, they might have held their own, as, for a time, the home forwards were playing a man short, and our men got more of the ball. A good bout of passing by the home backs ended in Dixie-Smith scoring, but no goal resulted from the kick. We remained on the defensive, and our tackling was none too good, the team, with the exception of Trail, showing a disinclination to go low enough. After some close play in front of goal, Simmonds dropped an exceedingly smart, if somewhat lucky, goal, as the ball just shaved the heads of more than one of our backs. The same player soon afterwards scored a try which was converted.

In the second half, our men showed to greater advantage, but there was none of the sting and precision about their attack that we have learned to expect. Alcock made one or two good runs, and Orpen almost got over, while the forwards, several times looked like scoring; the home defence was, however, very sound, and their kicking was exceedingly smart. Dixie-Smith and McEvedy had a great race for possession on one occasion, and the latter, who kept just in front, managed to kick the ball out of bounds; but in doing so, jostled his opponent, and we were not surprised that the referee awarded a try, although it seemed about six of one, and half a dozen of the other. Just on time, McEvedy put in a fine run along the touch line, and scored wide, the try was not improved upon, and the game ended in favour of Northampton by 4 goals and a try (20 points) to a try (3 points). Teams:—

NORTHAMPTON.—C. Leigh (full back); J. W. D. Smith, F. Simmonds, H. Dobbs, W. J. Dixon (three-quarter backs); H. E. Kingston, F. C. Coles (half backs); H. Weston, A. St. G. B. Cummins, B. I. Swannell, A. Chalmers, J. West, W. H. Edwards, G. Burke, C. H. Naylor (forwards).

GUY'S.—E. M. Harrison (full back); F. Allcock, L. J. Orpen, P. F. McEvedy, E. H. B. Milsom (three-quarter backs); M. C. Wetherell, A. B. O'Brien (half-backs); A. H. E. Wall, R. C. Lawry, A. R. Thompson, R. G. Anderson, B. Glendinning, D. H. Trail, E. L. Ward, A. M. Tolhurst (forwards).

REMARKS.—Where all were below par comparison would be invidious.

Hockey.

GUY'S v. LISSNESS PARK 2ND.

This match was played at Abbey Wood, on Saturday, December 7th.

In the first half, Bowle scored a goal for the Hospital from a very good centre from the right wing.

On changing ends the Hospital did most of the pressing, and 3 more goals were scored, 2 by Bowle and 1 by Gater, against the Park's 2. It was a good and keenly contested game, and the win for the Hospital of 4—2 about represented the play of the team. Team:—

GUY'S.—W. Strange, C. A. Basker, H. H. Moyle (backs); F. H. Wallace, A. W. Gater, W. M. Mollison, M. Wyatt, F. Morres, C. Bowle, H. O. Brookhouse and O. B. Travers.

REMARKS.—The whole team played well, the forwards showing good combination. Bowle made the most of his opportunities at centre and scores well. Mollison at half played a sound game.

Papers by Guy's Men.

An Address on a Model Hospital. By Thomas Bryant, M.Ch., F.R.C.S.—*Lancet*, 14th December.

Notes on Some Skin Lesions. By Edward C. B. Ibotson, L.S.A.—*Ibid.*

A Clinical Lecture on Delayed Union, Non-union and Mal-union of Fractures. By A. H. Tubby, M.S. (Illustrated).—*British Medical Journal*, 7th December.

Notes on the Dentition of the Sphenodon. By W. A. Maggs, L.R.C.P. Lond., M.R.C.S., L.D.S. Eng., and J. Lewin Payne, L.R.C.P. Lond., M.R.C.S., L.D.S. Eng.

Birth.

FINCH. — On December 13th, at Shepton Mallet, Somerset, to Mr. and Mrs. Alexander Henry Finch, a daughter.

Death.

PIERS.—On November 30th, at Burnham, Somerset, Henry Piers, Deputy Inspector General of Hospitals and Fleets, R.N., in his eighty-fourth year.

ED.—D. G. G.

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